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SOME DIFFERENT POINTS OF VIEW ON THE 1982
SOUTH ATLANTIC CONFLICT

By

Capt. Jose Maria Cohen, Argentine Navy (Ret.)

Unfortunately, the initial aim of this paper was not completely attained. Originally, the idea was to work exclusively on the analysis of new facts not dealt with in the conference held in London in 1982, or, at least, to enlarge the knowledge on some facts which had only been partially studied. However, the simple reading of the proceedings of that conference was enough to perceive some hasty judgements, some subjective expressions which hardly agree with the scientific tenor of the conference; there were also some statements difficult to prove and bearing little resemblance to reality. This is why we are as well going again over some of the items which have already been discussed, in order to bring new elements to allow their reassessment and/or rectification. In general lines, this paper - at the risk of disappointing at least part of the audience - will deal strictly with the politico-strategical features of the conflict, and so it's not intended to discuss the operational issues, even if at least in one item, it will get rather close.

1) The first of the subjects we should deal with now is that of the origins of the 1982 crisis, which cannot be brought down to the setting out of an alleged Argentine strategy conceived 40 years ago¹, and even less "to a strategy to recover territories which, because of a poor interpretation of History, she (Argentina) claims have been occupied by foreign invaders"².

The underlying conflict in this problem is already 150 years old, but it is not the case to relate it in detail now; on the other hand, it is important to point out that its recent worsening, which brought about the present, crisis, started much earlier than March 19, 1982, when Mr. Davidoff and his workers landed on South Georgia. On this fact, we cannot ignore the somewhat surprising interpretation given by Dr. Possony in the first paragraph of his paper in London³.

Objectively, the real fact is that after 17 years of negotiations with Great Britain, who reluctantly accepted the terms of UN Resolution 2065, the British succeeded in getting Argentina to substantially relieve them of the financial burden of having to support the Islands, without making any progress in the political aspects of the negotiations, which were of the

utmost importance for Argentina. The British position not only stiffens as from 1976 (in coincidence with Lord Shackleton's first report, where he vaguely mentions the existence of hydrocarbons in the waters surrounding the Malvinas) but, starting with the consultations of Vice Chancellor Nicholas Ridley with the Islanders in 1980, it becomes absolutely intransigent and distant, to the point of diplomatic discourtesy. It is difficult to believe that this is not related to the well known CIA assessments, which state that in the area surrounding Malvinas there is almost as nine times more oil than in the North Sea (assessment which Lord Shackleton tries to disprove in his first and second report).

In February 1981, what turned out to be the penultimate round of negotiations was held in New York. Great Britain, having included some Islanders in its delegation, put forward the following proposals:

- To freeze with no fixed time limit, the negotiations over sovereignty;
- To make agreement leading to the economic co-exploitation of sea and subsoil resources.

These points were rejected by the Argentine Government, since it amounted to accept "sine die" the British illegitimate rule and only sharing - without exclusive rights with regard to third parties - the exploitation of resources which belonged entirely to Argentina.

The last round of negotiations held in New York in February, 1982, not only did not show any progress, but also evidenced the British intention of putting negotiations to an end and make a unilateral use of the Islands, and as it later became apparent, of establishing economic, political and military conditions which would turn irreversible the "status quo" (see following item 3).

In this context, the Davidoff episode seems to have been picked up by Great Britain as sent by Heaven to start an incident - absolutely out of proportions with regard to reality and to the diplomatic records and uses - which will allow her to break up negotiations with Argentina. Chapter 3 of Lord Franks Report⁴ shows clearly how Great Britain magnifies the real facts, even resorting to the technical fallacy which says that "the South Georgia and South Sandwich Islands are British dependencies, juridically different from the Falkland Islands (sic), but administered for convenience purposes by the Government of the Falkland Islands (sic), which is empowered to legislate over them"⁵. This is a riddle meaning that the South Georgia Islands "are but are not" dependent on the

Malvinas and tends to prove that the documents used by the Davidoff Group were not valid nor correct.

Therefore, Great Britain finds a justification to make use of force and on May 23 "Ministerial approval was given for HMS Endurance and the Royal Marines aboard her (22) to be used to remove them" (The Argentine workers at South Georgias)⁶.

The provocation is completed with an attack against LADE (Argentine Air Force airline) offices in Puerto Argentino (Port Stanley), perpetrated the day before, when the Argentine flag was replaced by the Union Jack, aside from other minor damages⁷.

The crisis is artificially pushed on by Great Britain and on March 29 "the Prime Minister and Lord Carrington discussed the matter on their way to Brussels. They decided that a nuclear-powered submarine should be sent to support HMS Endurance, and this was notified to the MOD. In reply Mr. Nott sent a telegram to the PM in Brussels informing her that a number of steps had been taken. As HMS Endurance might be required to remain in South Georgia for the foreseeable future and would begin to run short of food and other supplies in three weeks, the RFA "Fort Austin had that day sailed from Gibraltar to replenish HMS Endurance. She would also be capable of providing support to other ships should they have to be sent to the area. In addition a nuclear-powered submarine would be sent covertly to reach the Falklands by April 13 and a second submarine would be prepared... Also on March 29 the Commander-in-Chief Fleet ordered the Flat Officer First Flotilla, Rear Admiral Sir John Woodward, to prepare to detach a suitable group of ships from Gibraltar and to be ready to proceed to the South Atlantic if required."⁸

Later, on March 30 "it was decided ... to confirm the order to send a second submarine. Consideration has been given to sending a third submarine."⁹

Most remarkably, no larger fleet was sent because "its preparation, which could not be concealed, would be highly provocative and escalatory, unless the Argentines were preparing to invade the Falklands, OF WHICH THERE WAS NO SIGN!"¹⁰

Under these conditions, it is legitimate to ask who was the first to make use of force or threat to use force in these incidents. Similarly, we should ask who authored "the invented legend of the war initiation" mentioned by Dr. Pssony in his comments as Panelist.¹¹ Naturally, the "aggressor" label given to Argentina proves to be false, or at least highly debatable.

It has been a commonplace in the academic and journalistic literature on the conflict, the idea that Argentina was led to an armed confrontation by a dictatorial government, eager to outlive the existing political, economic and social problems, and to make the military rule last over the civilians at any cost. Aside from showing an absolute ignorance of the Argentine reality and of the popular feeling towards Malvinas, this reasoning may turn against its British authors almost word by word. In effect, nobody ignores that thanks to their military success in Malvinas, Mrs. Thatcher and her team have substantially improved the extremely difficult position where they had fallen before the conflict, due to economic recession, increasing unemployment rate, growing social uneasiness, fierceness of a political opposition with increasing arguments against it, splits within her own party because of ideological differences, difficulties with other EEC countries (the support of which during the conflict was extremely highly paid) etc. Not to mention the particular situation of the Royal Navy which, as in 1957 and 1966, had to face the impending and dismal perspective of drastical cuts in its units, bases and personnel. Once again the very powerful Navy lobby set out to demonstrate that it was not only wrong to try to cut down the Royal Navy but that it was also necessary to build it up, irrespective of the mammoth Trident project. The attempt seems to have been successful so far, thanks - above all - to the "surprising" readiness of the RN which allowed the fleet to proceed only 3 days after the seizure of Malvinas by Argentina, a logistical and operational feat which would certainly be admirable if it were true that it only had three days' notice to even reactivate some units which had been practically put out of service.

2) Another point which is interesting to go back to is the relevance of the Argentine claim over sovereignty 150 years after the usurpation. Time, in the view of many, legitimates what is obtained by force and, at this point, a claim like the one made by Argentina would not only be anachronistic but also slightly ridiculous, or, as it appears in "Proceedings" published in 1982, an interest in sovereignty which "has been discounted as an old fashioned "idee fixe"."¹²

Under these circumstances, we may ask if the claims made by other countries in similar conditions, also deserved or historically deserved the pejorative judgements of experts on international relations and the press in general, or, if this rather contemptuous treatment is only reserved for young countries which as "everybody should know", specially when Latin, "are only "guided by unforeseeable and irrational emotional impulses and actually lack maturity for knowing exactly what is good for them."

Certainly enough, Britain did not consider as an anachronism the French actions taken as from 1870 which finally served to recover Alsace-Lorraine 48 years after having lost them in war. Neither the academic world nor the press think as "an old fashioned idée fixe" of Spain's steps in order to recover Gibraltar or of the struggle of the Irish people to become a united country, or of the efforts of Red China to restore its territorial integrity, lost through the so called "uneven treaties" - some of them more than 150 years old. Obviously, nobody considered anachronistic that India should use force to put an end to the several hundred-years old Portuguese colonial enclaves. Thus, it would be possible to go on quoting examples that prove false what could be considered as an axiom formulated by some, saying that "it is impossible to change world frontiers every 150 years" but that actually means "it is not up to anybody to change world frontiers neither every 100, nor 50 nor 10 years, nor ever, when faced against a major power", which demonstrates the falsehood of the often quoted juridical equality of nations, so dear to world powers, at least in theory.

On the other hand, if the sovereignty claim idea was so absurd, why does it not sound so absurd in Mrs. Thatcher's words, when she states that, "Sovereignty cannot be changed by invasion?"¹³ Or should we come to the conclusion that this principle did not exist in 1833, when the British invasion did away with the Argentine Administration?

3) It is worth examining an issue which might reasonably explain the British behaviour and procedures already discussed in item 1.

At the time when the Tropic of Cancer was established as the Southern Limit of the NATO Maritime Area, the Soviet Navy was just starting to detach from its own coastline and the idea of ascribing her the capacity to project power into the North Atlantic was then a daring forecast which, however, began to come true in the early sixties. Reality shows now that the once daring forecasts has been totally exceeded. Today the Soviet Naval Forces constitute a global threat which may affect the maritime interests of NATO countries in any part of the world.

NATO is, of course, acutely aware of this threat and has been discussing and analyzing the problem for many years, without having reached a solution yet.

The U.S. position appears clearly stated by the former SACLANT, Admiral Harry D. Train: "The recently developed ability of the Soviet Navy to project power far from its home waters necessitates a NATO capability to counter. Simply put, it means a greater commitment by all maritime members of the alliance if we are to keep pace and avoid a dangerous imbalance.

Furthermore, in the same issue of the same journal Captain Roger Villar RN states: "Undoubtedly the solution (to the Soviet threat) demands radical thought; equally undoubtedly it is a problem which has to be addressed in concert with others who will not necessarily be our NATO allies "in toto" but rather the ship owning nations and those with particular interests in various areas."¹⁶

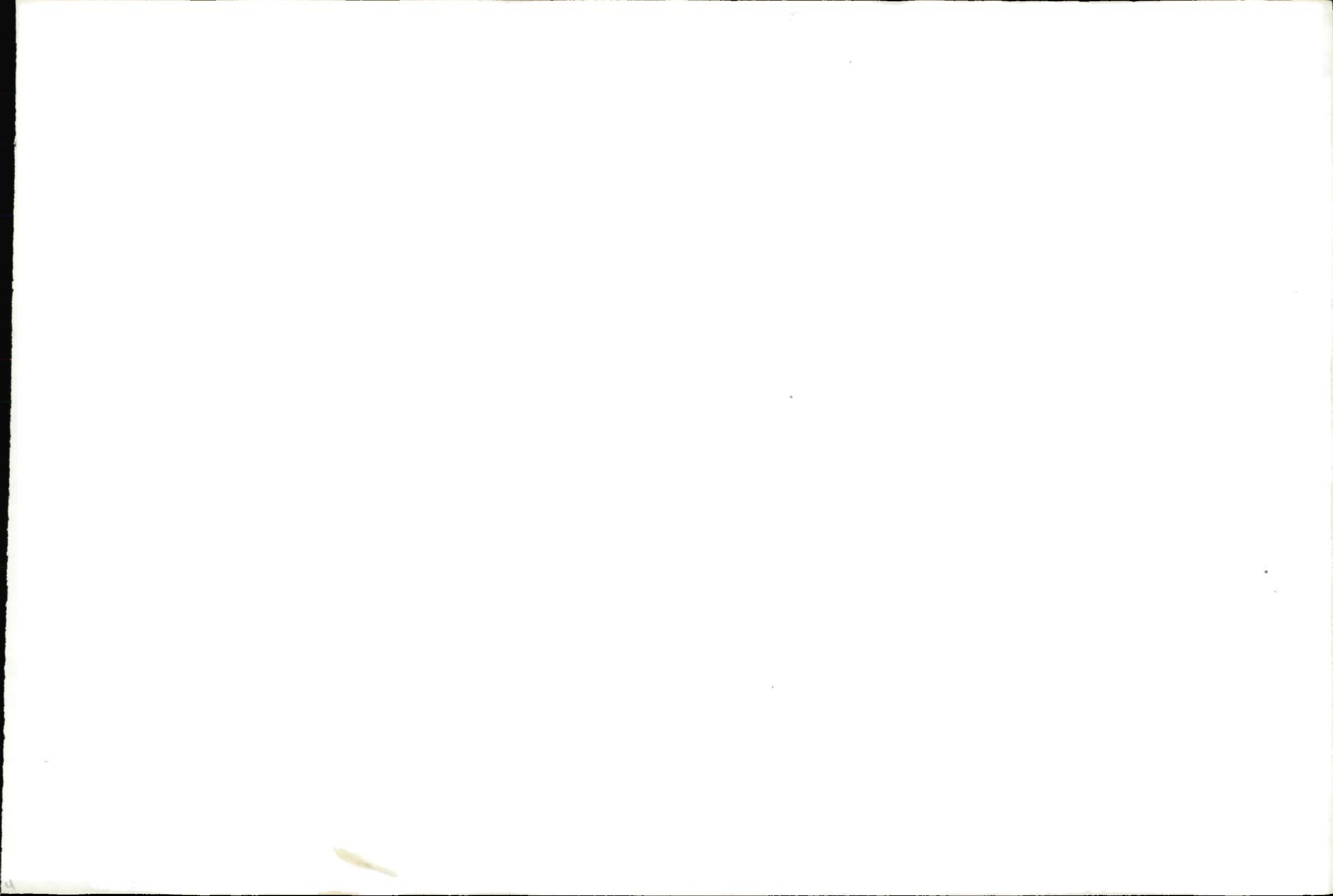
Both standings, in spite of their differences, aim essentially at the same target, i.e., to face the Soviet threat out of NATO's narrow geographical frame. Could it be that Britain, honouring the "special relationship" she maintains with the U.S., wishes to sell the same "made in USA" product to the EEC under a European-like cover? Or could Britain be trying to lead a new European alliance to which she would contribute with the insular or coastal support bases remaining from her empire?

Having no final answers to these questions, Latin Americans and particularly Argentines, wonder about the relationship between these British aspirations and the Malvinas episode, a key position which is no longer questioned, since "it is clear that the importance of the South Atlantic Region generally is rising and that the region will grow significantly in importance as the Panama Canal becomes more questionable or unreliable as a sea lane linking the Atlantic with the Pacific."¹⁷

In any case it should be noted, to conclude, that Great Britain does not appear to have succeeded so far in her quest for partners, whether European or not, which may help her to build and maintain her highly costly "Fortress Falkland", and that quite a number of people in Great Britain doubt whether this is a sound attempt, and even whether it is sound to maintain the islands.

In the same way as an expert risks asserting, without proving it, that "it is unlikely that there are truly intelligent Argentinians who value the possession of the Falklands higher than the continuous friendship with the UK"¹⁸ It will be enough on the other hand, to read in British newspapers the increasing complaints from Conservatives, Labourists, Liberals and simple citizens who send "letters to the Editor" in order to confirm that what has been stated in the preceding paragraph is absolutely true. In the Argentine newspapers there can be found a very strong criticism about the way the crisis was conducted, but certainly not a discussion whatsoever about the right of Argentina over the islands, or about the need to get them back sooner or later.

4) It is impossible to question that "the value of SSN was proved beyond doubt even in the conventional war."¹⁹



It necessitates NATO "nations to look beyond their national and Atlantic interests and embrace a fundamental philosophy of worldwide commitment.¹⁴

One of the reasons for the lack of response from NATO countries to the U.S. posture appear to be the Europeans' doubts about the coincidence of their goals with those of the U.S. - they doubt that there is a total coincidence of goals and that this coincidence applies anywhere. Furthermore, the Europeans are also doubtful as to the quality and prudence of the U.S. leadership which might get Europe involved in an undesired conflict.

Parallel to this U.S. posture there is a much less distinctly expressed, although quite evident, British posture. At a "Seminar on Maritime Strategy in the 1980's held in 1981 by Navy International, the Nautical Institute and the Royal United Service Institution," the following conclusions were arrived at (paraphrased):¹⁵

"1) The EEC was fully aware of its high degree of dependence on "sea transported oil and raw material which were imported from overseas."

"2) It was perturbed by the vulnerability of its sea links with "Africa, the Arabian Gulf and other parts of the world from where these commodities were imported and which are not covered by NATO forces in the face of increasing Soviet maritime power, which presented a growing and calculated threat."

"3) That freedom of movement by sea is vital to the economies of the EEC and the Third World."

"5) Called on maritime member states to strengthen their naval forces and to deploy, in a co-ordinated way, their naval forces outside the NATO zone; further that this should be accomplished within the framework of European political co-operation."

The editorial goes on stating: "NATO will not project its own influence south of the Tropic of Cancer, but if Europe wishes to ensure free passage for its merchant shipping along these routes, then the individual member nations must recognize this fact and be prepared and willing to do something about it. Britain certainly cannot do this on her own, nor can France, nor Germany, etc. The only way in which the growing Soviet threat can be countered is if various EEC member states take real note of point N°5 and act in concerted fashion to provide multi-national forces on extended deployment to these areas."

But there is a small issue which deserves being discussed or, at least, better and more extensively clarified on this occasion.

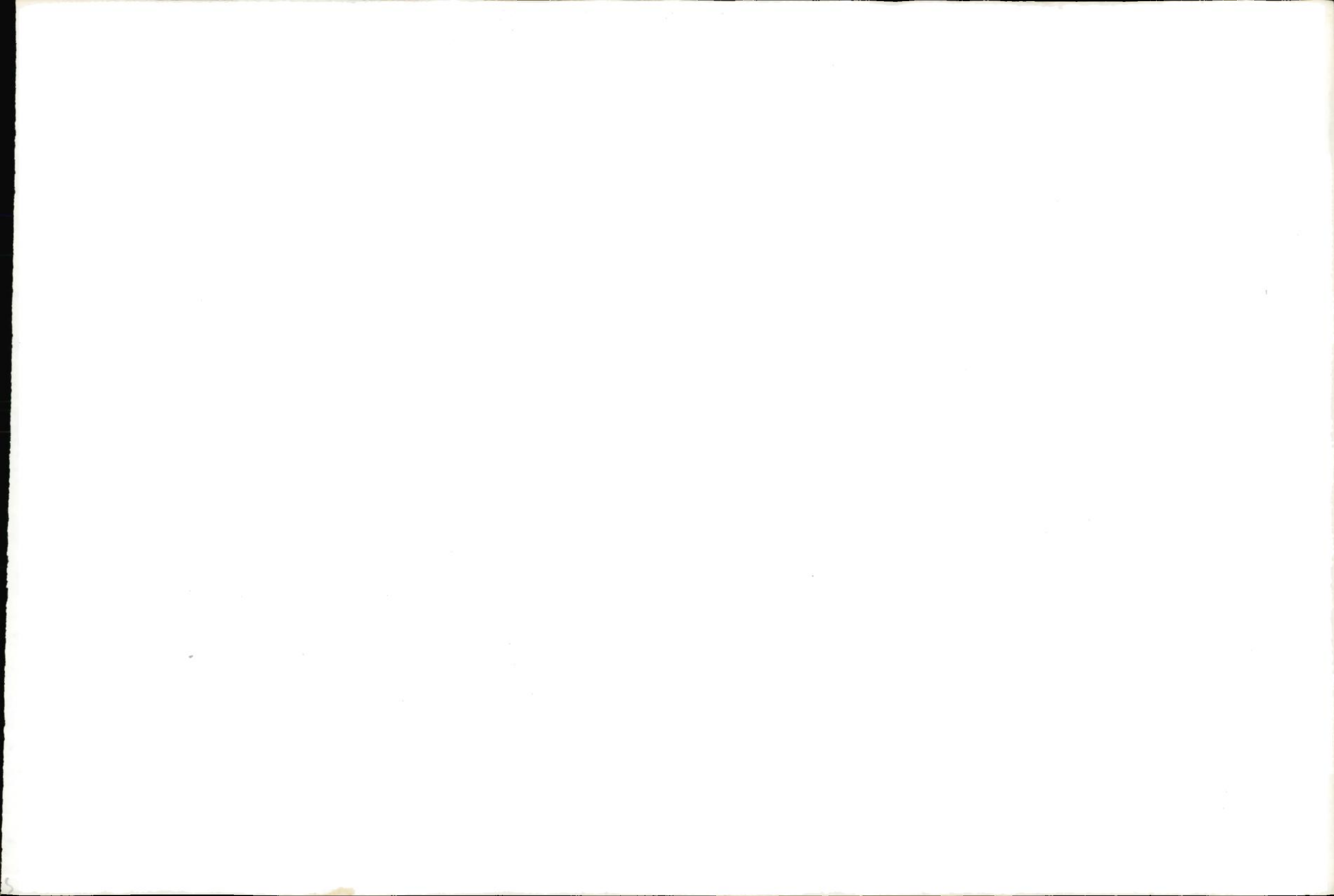
Numerous international press sources, including the British press itself, and also some Members of Parliament, have stated that some British ships were carrying nuclear weapons, with which they are normally equipped when on service under NATO, and which had no time to unload since they were urgently ordered to proceed to the South Atlantic. Yet, British official sources have systematically denied such a thing. Therefore, it sounds strange that the RN is carrying out search operations, in the place where HMS Sheffield was sunk in order to recover at least some of the devices that would have been lost.²⁰

While this subject cannot be fully clarified, one must admit that it poses reasonable doubt. Fortunately, there were many moderate voices in the British Parliament which asserted it was "unthinkable" to use nuclear weapons against Argentina. This was also confirmed by the British representative during the discussions at the Security Council in May, 1982. Of course, at that time, during the way, Mrs. Thatcher had not yet attended the Second Special Session of the UN General Assembly on Disarming, a forum where, on June 23, 1982, she said "the promises on non-use of any sort of arms are not reliable amid war tensions."²¹

Anyway, coming back to the SSN, it can be easily shown that Great Britain is guilty of having violated, at least, the 1967 Tlatelolco Treaty or "Treaty for Nuclear Arms Proscription in Latin America", two attached protocols of which she has signed, one open to nations in possession of nuclear arms and the other to nations governing, either "de jure" or "de facto", territories situated within the geographic area involved in the Treaty, article 4 of which clearly includes the Malvinas, South Georgia and South Sandwich archipelagoes. The importance lies in the fact that, on signing those protocols, Britain committed herself to respect Article 1 of the Treaty, by which "The contracting parties undertake to use material and equipment submitted to their jurisdiction for exclusively peaceful purposes..."²²

Obviously, a nuclear-powered attack submarine cannot be considered as making "peaceful" use of her nuclear "equipment", even though it were merely present in the conflict area, not to mention the sinking of cruiser ARA General Belgrano. If this fact is not a plain violation of the Treaty signed by Britain, it would be difficult to find a better example.

In any case, all this has represented a very neat lesson of the conflict for all non-nuclear nations and for Latin America



and, particularly, Argentina. All virtuous, paternalistic, and therefore restrictive declarations and actions by nuclear powers tending to horizontal non-proliferation, based on a self-assigned greater responsibility to handle nuclear weapons and technology, are bare attempts to crystalize the nuclear "status quo" as it stands, and thus maintain the privilege that this grants them in terms of plain military power. If this already appeared evident before Malvinas, it has now been demonstrated.

5) A further issue which deserves deep investigation is the one referring to presumed damages inflicted to carrier HMS Invincible as a result of an air attack jointly carried out by the Argentine Air Force and the Naval Air Arm.

The Spanish version of a document from a British source reads textually: "On May 30, Argentina reported on an attack to the nucleus of the British fleet, particularly to a 'carrier type' ship, and the following day a communique (nº 112) referred to one of the British carriers (unspecified) as disabled for combat, that is to say, damaged. There was no reference to sinking nor further insistence on that information. Coincidentally, in the course of a TV interview in London (not an official communique) Minister of Defense John Nott acknowledged that Argentina had attempted an attack against the Invincible, but he pointed out that such attack had failed. Once the war was over and the carrier returned to England, it was admitted that one of its turbines had been replaced while the carrier was in the conflict area; but Britain always denied that the Invincible had been damaged by the Argentines, and the latter never affirmed it explicitly."²³

Without passing judgement on the preceding statements, it is convenient to disclose a series of coincidental facts which deserve close examination.

a) On June 3, 1982, a British newspaper reports the following news under the title: "Fraser offers to halt carrier purchase". "Australian Prime Minister Mr. Malcolm Fraser has said Britain can keep the aircraft carrier HMS Invincible due to be sold to Australia if the ship is needed because of the Falkland crisis." "But the offer is unlikely to be accepted and the £175 million sale looks like going ahead as planned next year. Final terms have already been agreed and Mr. Peter Blaker, Minister of State for the Armed Forces, said in the Commons recently, 'We cannot cancel the sale.'"

"Mr. Fraser said in Canberra yesterday that in view of the losses that the Navy had suffered in the conflict, Britain needed not feel morally obliged to go ahead with the sale. Formal documents in the sale have yet to be signed, but there has been no suggestion that the sale would be held up because of the Falkland conflict."

"Mrs. Thatcher had received a message from Mr. Fraser offering to release Britain from the terms of its agreement to sell Invincible, aides said later, and she is expected to reply fairly quickly."²⁴

At a later time, it is made public that in spite of the British denial, "the sale of HMS Invincible to Australia has been cancelled possibly to be replaced by the sale of HMS Hermes."²⁵ Shortly after, in December, 1982, a British official source confirms that "we shall not proceed with the sale of HMS Invincible" but it does not mention Hermet at all.²⁶

b) "The new carrier HMS Illustrious ... was accepted into service on the 18th of June ... and she was commissioned at sea ... on the 20th to save time."²⁷

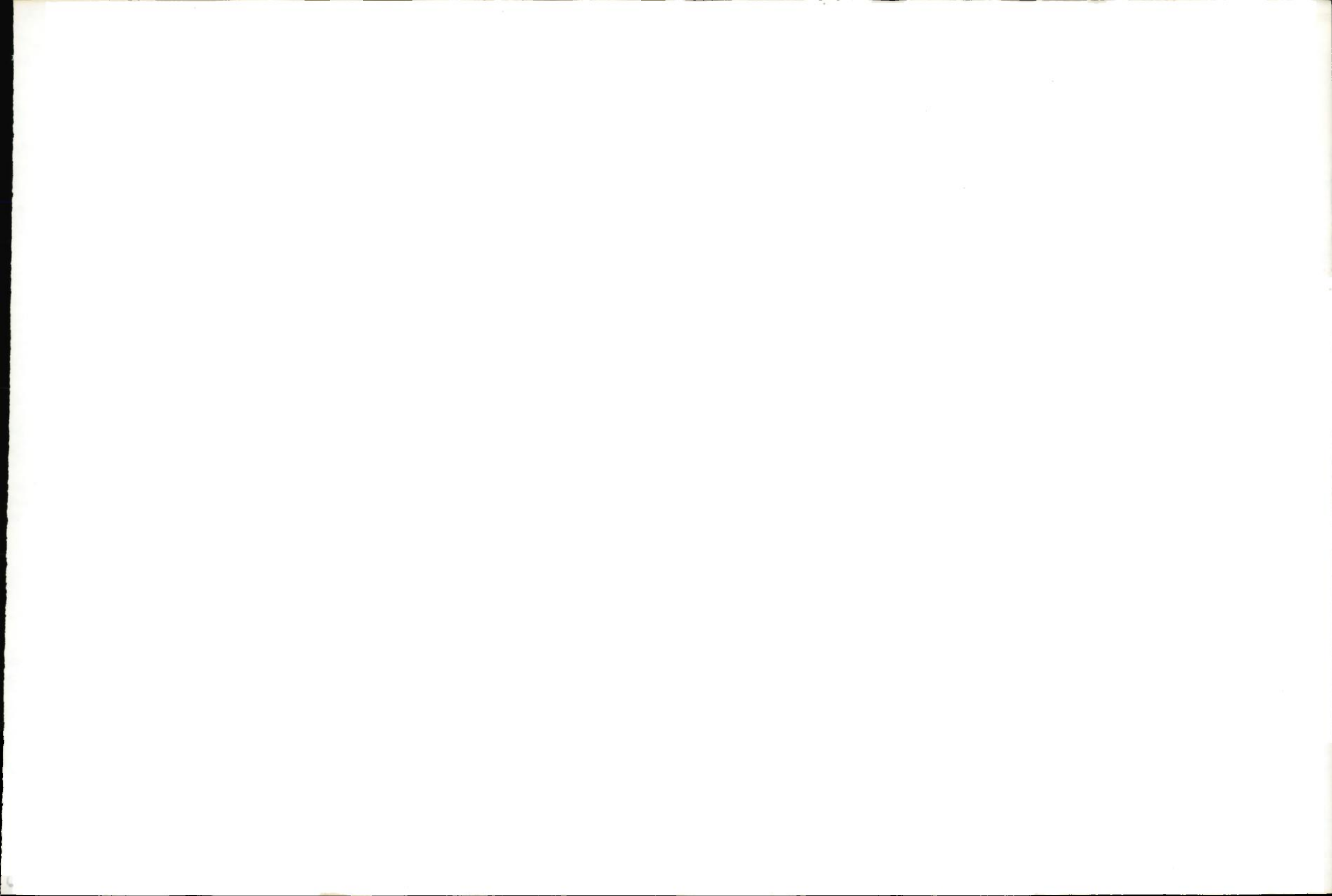
c) Official Argentine sources say that as from May 30 there was a remarkable reduction of the British air activity (Harriers) for several days, even in favorable weather conditions.

d) The British landing at Fitzroy on June 8 was carried out without air cover, resulting in a tremendous disaster when the Argentine Air Force launched its attack.

The facts mentioned in paragraphs a) to d) do not allow to infer exactly enough whether or not the Invincible was damaged by the Argentine air attack. However, this information should not be ignored and poses at least a reasonable question that should continue to be under the critical lens of researchers. This is where this paper comes closer to an operational issue, but the reason why this item is included here is quite different. It points out to remark the rather obvious interest of the RN in preserving the image of carriers as with some sort of mystical quality attached to them, maybe as the last symbols of her improbable return to a first rate navy status, with a global commitment and capabilities.

6) In an address to the House delivered on May 13, 1982, Mrs. Thatcher stated that "No military options had been stopped by the negotiations to date, for that would be too easy a ploy on the part of the Argentinians. The House could not discuss military options because nothing would be more helpful to the enemy or more damaging to Britain's cause."²⁸

On May 16, Mr. John Nott, interviewed by Gordon Clough on the BBC radio programme 'The World this Weekend' said that "time was now very short before a decision to take the military option would have to be made."²⁹



On May 20, at the House, Mrs. Thatcher, before what she considered to be the maximum acceptable limit for negotiation, states: "I believe that if we had a dozen more negotiations the tactics and the results would be the same. From the course of these negotiations and Argentina's persistent refusal to accept Resolution 502, we are bound to conclude that her objective is procrastination and continuing occupation leading eventually to sovereignty." "These proposals have been refected (sic) (rejected?). They are no longer on the table."30

Thus, abruptly, all possibility of negotiation is terminated, as the mediation of the President of Peru was equally brought to a sharp end with the sinking of the "General Belgrano."

As it is known, the landing at San Carlos took place at dawn on May 21, which shows a really extraordinary speed between the announcement of the end of the negotiations and the beginning of such a major military action.

This, and the "crescendo" of government statements, seem to suggest some now obvious interactions:

a) The option of choosing the "military action" may have been taken long before May 20, an assumption which is worth adopting on a working basis for the analysis.

b) Taking into account how strongly military operations can be affected by weather, specially a landing operation, it is not absurd to imagine that the process was really inverse: when the situation made it possible to foresee the chance of landing on the 21st., the negotiations were abruptly terminated a few hours before.

c) Along this line of thought that looks logical enough, negotiations, at least during several days, may have been only a smoke screen masking the impossibility of the Task Force to land sooner, pressed as it was by logistic requirements and the risk of suffering more damage.³¹

Thus the facts, as presented to the world perception, looked convincing enough to justify the military action, but this alternative sequence of events gives a somewhat more consistent explanation both for the unexpected and irreversible end put to negotiations, and for the extreme swiftness in the execution of the landing operation after that.

7) It would take too long and it would be of little use to try to refute the series of gratuitous statements included in "Maritime Perspectives in the Southern Cone: A South American View" by Professor Carlos V. Lopez (pages 31-40, Proceedings,

1982), which obviously intend to picture Argentina in a systematically aggressive attitude, especially against Chile.

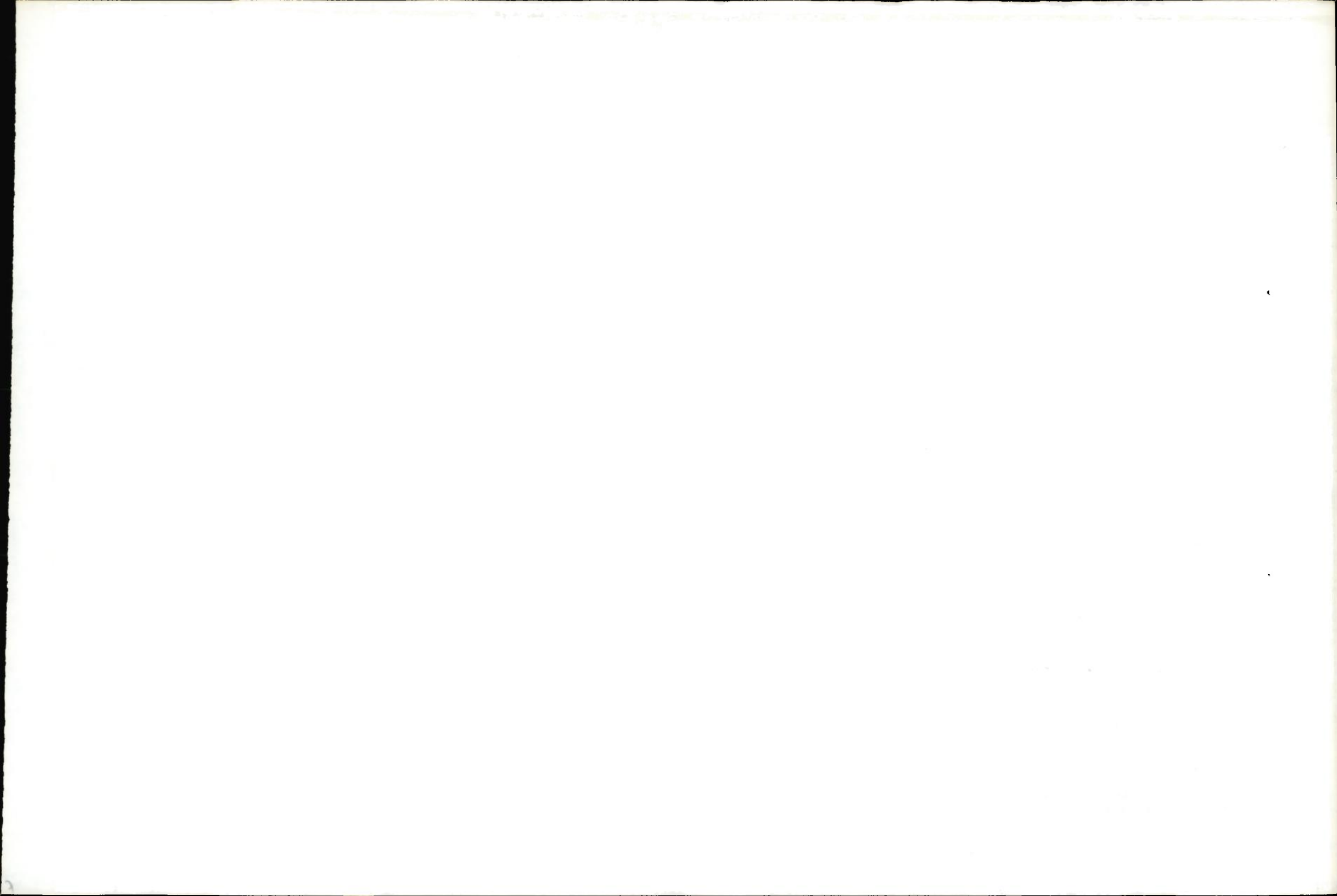
It would just be enough to say that during the aggression war that Chile fought against Peru and Bolivia, taking away from Peru the provinces of Tacna and Arica, and from Bolivia her coast to the Pacific Ocean, north of latitude 24°S, having previously recognised those territories as belonging to Bolivia refusing to honour a treaty signed at Santiago on August 10, 1866), Argentina maintained the most strict neutrality.³² Instead, during the Malvinas conflict, in 1982, the aggressive deployment of Chile's army, air force, and fleet, forced Argentina to withhold defensive means that could have been usefully employed against Britain.

8) Synthetic lessons for Latin-Americans (et al)

a) Any use of force by a small country, either morally justified or not, but labeled as an "aggression" by the major powers, must not be permitted to pay (i.e. Malvinas). The exceptions to this rule appears when the country using force is a major power (i.e., the USSR in Afghanistan) and a Communist country (i.e. Cuba in Angola).

b) Treaties are fulfilled because they should (i.e. TIAR in 1962, when two Argentine destroyers were commissioned in support of the blockade to Cuba), and treaties are not honored when it is not convenient to do so (i.e. TIAR in 1982, when the U.S.A. left Argentina alone facing a colonial power).

c) Might is right, especially when might is big enough.



NOTES

1) Dr. Stefan Possony, "Proceedings of the Conference on the Anglo-Argentine War of 1982", p. 11.

2) Professor Carlos U. Lopez, "Proceedings ...", p. 35.

3) Dr. Possony states ("Proceedings ...", p. 10) that "on March 19, 1982 an Argentine naval transport landed workmen, who may have been marines in disguise, on South Georgia ..." Not being proved, this proposition has the same academic soundness and the same factual content as any other of the same structure, like "who may have been Snow White and the Seven Dwarfs in disguise". And this can be proved taking into account that Mr. Davidoff requested authorization to land 41 workmen (Lord Franks Report, No. 168, p. 49, London, Her Majesty's Stationery Office, January 1983), and that the communique issued by the British Minister of Defense on May 12, 1982 reports that 39 civilians were taken prisoners in South Georgia, including two Chileans, two Uruguayans and a Spaniard ("Falklands - The Official Account", Spanish version by Latin American Newsletters Ltd., Boundary House, 91-93, Charterhouse Street, London, p. 30), which would reduce the margin for an improbable "Marine Task Force" to two people.

The assessment made on March 21 by the Grytviken "Base Commander" (Lord Franks Report, No. 170, p. 50) similarly lacks rigour when it states that "some of the Argentines were dressed in what appeared to him to be military-style clothing and had behaved in a military way, but had not carried firearms."

4) pp. 49 to 72.

5) Report No. Dd. 8298600 Pro 18044 (COI), May 1982, from the Foreign and Commonwealth Office.

6) Lord Franks Report No. 178, p. 52.

7) Lord Franks Report No. 174, p. 51.

8) Lord Franks Report No. 213, pp. 61/62.

9) Lord Franks Report No. 225, p. 64.

10) Lord Franks Report No. 225, p. 65.

11) Dr. Stefan Possony - Proceedings of the Conference on the Anglo-Argentine War of 1982, p. 30.

12) Dr. Stefan Possony - Proceedings of the Conference on the Anglo-Argentine War of 1982, p. 20.

13) "The Times", Friday May 21, 1982, p. 4, reporting The Session in Parliament on May 20.

14) "Naval Forces" No. 1, 1982, "NATO's Maritime Responsibilities" - Adm. H. D. Train USN, p. 16.

15) "Navy International", February 1982. "Editorial", p. 835.

16) "Navy International", February 1982. "The Future of the Surface Fleet" by Roger Villar, p. 843.

17) Gregory R. Copley - Proceedings of the Conference on the Anglo-Argentine War of 1982. "The South Atlantic War: A Summary of Lessons", p. 157.

18) Dr. Stefan Possony - Proceedings of the Conference on the Anglo-Argentine War of 1982, p. 11.

19) Sir Patrick Wall, MP - Proceedings of the Conference on the Anglo-Argentine War of 1982. "The Falkland Islands Campaign - Lessons for NATO", p. 109.

20) "New York Times", January 23, 1983.

21) Quoted from the quarterly journal "Criterio" No. 1899, Bs. As. April 14, 1983. Victor Espeche Gil, "El Reino Unido viola la zona libre de armas nucleares en America Latina", p. 119.

22) Idem 21, p. 118.

23) "Falklands - The Official Account" - Spanish version, by Latin American Newsletters Ltd., Boundary House, 91-93, Charterhouse Street, London, p. 7.

24) "The Guardian", Thursday, June 3, 1982, p. 2 bottom.

25) Lt. Colonel Robert Jarman - Proceedings of the Conference on the Anglo-Argentine War of 1982. "The impact of the South Atlantic War on British Defense Sales", p. 131.

26) "The Falkland Campaign: The Lessons" presented to Parliament by the Secretary of State for Defense, by Command of Her Majesty, December 1982, London, p. 33, paragraph 307.

27) Neville Trotter, MP - Proceedings of the Conference on the Anglo-Argentine War of 1982. "Command and Logistics from the UK Base during the South Atlantic War", p. 122.

28) "The Times" - Friday, May 14, 1982, p. 6.

29) "The Times" Monday, May 17, 1982, p. 4.

30) "The Times" Friday, May 21, 1982, p. 4.

31) Virginia Gamba "Malvinas Confidencial". edited by "Comite pro-Soberania de las Malvinas", 1982, Buenos Aires, p. 23.

32) Jose R. Gutierrez, Coleccion de Tratados de Bolivia (Santiago 1869), pp. 20-23. Recopilacion de leyes de Chile (Santiago 1894), II, pp. 22-28. U.S. Diplomatic Correspondence, 1864, IV, p. 173-179. British and Foreign State Papers, pp. 717-719. Quoted by Gordon Ireland, "Conflictos de limites y de posesiones en Sud America" - Cambridge, Massachusetts, Octubre de 1937.

POLICY FAILURE AND STRATEGIC SURPRISE IN THE SOUTH ATLANTIC

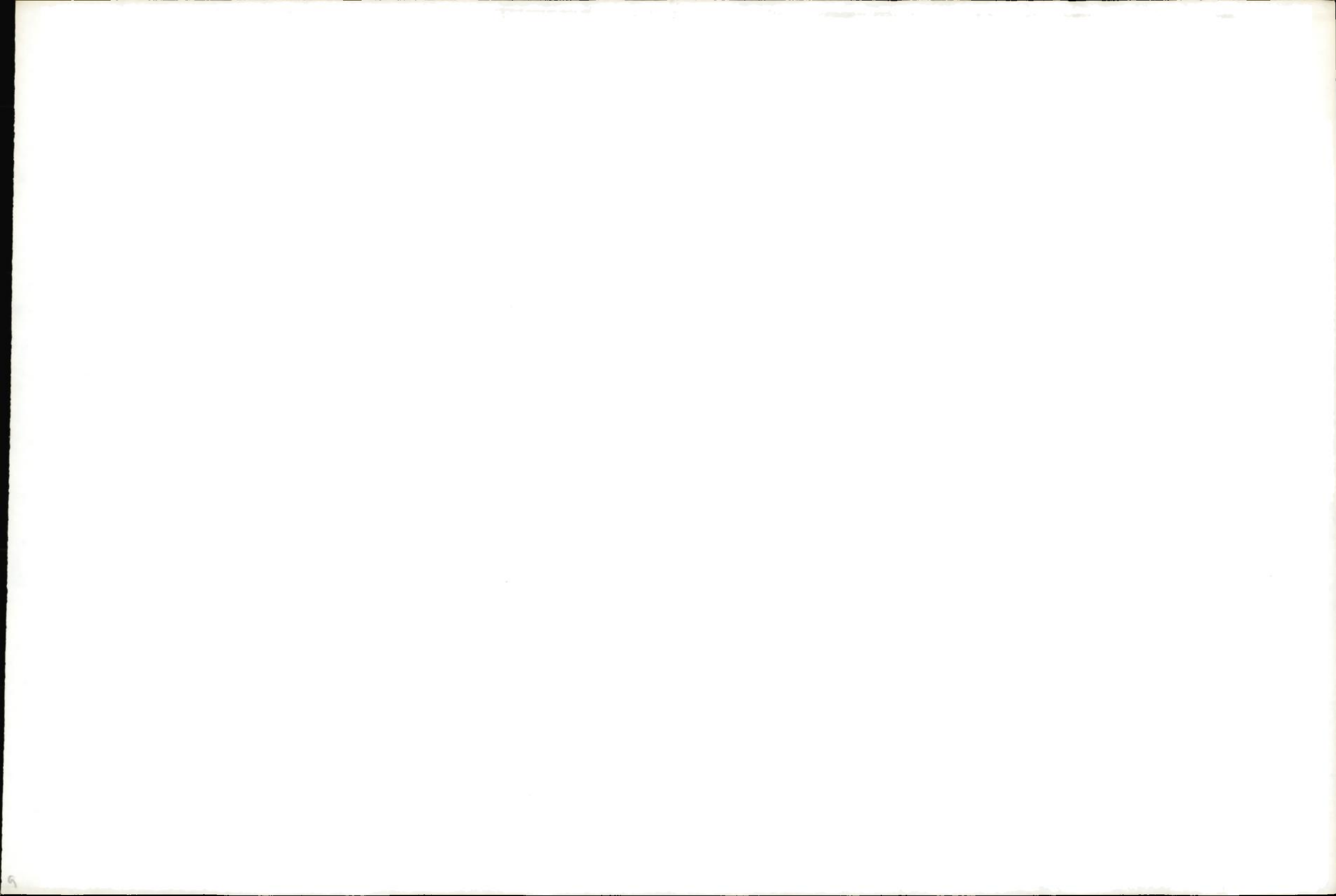
By

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With the possible exception of the Soviet Union, there were no real winners in the recent war in the South Atlantic.¹ Argentina lost face and General Galtieri lost power. Margaret Thatcher gained politically but at a great cost to her country's economy. The price tag for the islands' continued defense will mean that, for some substantial time to come, the Falklands tail will continue to wag the British bulldog. The United States obviously lost friends and tangible support for the Reagan administration's new policy in Central America.

That policy may have unwittingly encouraged the Argentines to order their troops to capture the islands in the first place. General Galtieri visited the United States twice in 1981, in August and October. His second visit included a lunch with General Edward Meyer, the Chief of Staff of the Army, Thomas Enders, then Assistant Secretary of State for Inter-American Affairs, and Richard Allen, then the presidents' National Security Advisor, who told the press corps afterwards that he found the Argentine general "Impressive". At about the same time as General Galtieri was shuttling between Washington and Buenos Aires, Jeanne Kirkpatrick, our U.N. Ambassador, paid a four-day visit to Argentina. The reason for all this extraordinary U.S./Argentine diplomatic activity is no secret. We were hoping that the Argentines would help us in Central America.² They had developed high expertise in dealing with terrorist and guerrilla activity, expertise demonstrated in their own recent domestic history, and were going to exercise their skills in an area of special concern to us.

Unfortunately but predictably, General Galtieri and the junta read this arrangement as an opportunity to weaken United States support for Britain's Falklands policy. Our own diplomatic failure was clearly one of omission, not commission, but no more excusable for that. We should have anticipated the Argentine perception of what their help in Central America might be buying them. That we did not anticipate the junta's quid pro quo and make our position explicit to them at the outset is as regrettable as it is understandable. Wishful thinking and divided counsel within the administration resulted in an equivocal silence that allowed a disastrous war between two allies. Resolute diplomacy could have prevented it.



There was early evidence that the junta was relating Argentine involvement in Central America on our behalf to its ambition to regain the Falklands/Malvinas. On 24 January 1982, Iglesias Rouco, a journalist with close contacts inside the Argentine junta, and especially with the foreign minister, Nicanor Costa Mendez, wrote an article entitled "The Foreign Offensive," for the front page of the influential daily newspaper, La Prensa. It explicitly stated:

"According to reliable diplomatic sources, the Argentine government is about to submit a number of conditions to the British before proceeding any further with negotiations on the Malvinas. If London does not accept them, Argentina will immediately interrupt the talks....Washington has reportedly expressed its support for any action leading to the recovery of the islands, without excluding military actions....Both in the United States and in Europe it is believed that if the next Argentine attempt to resolve the negotiations fails, Buenos Aires will take over the islands by force this year."

On 2 February the CIA printed a translation of Rouco's article in its Daily Report on Latin America (FBIS). This received wide circulation, yet we were unaware of the strength of Rouco's connection with the foreign minister and ignored this early warning of what was in store. Rouco's article in fact revealed more about Argentina's perception of the U.S. attitude than it did about any indiscretion on the part of any U.S. diplomat. This was the Argentine share of wishful thinking. The real circumstances of the Argentine/American tie emerge clearly in a secret interview granted by General Galtieri to CLARIN correspondent Juan Bautista Yofre on 29 July, 11 August, and 18 August, an interview when released on 2 April this year against the general's wishes, resulted in his imprisonment. General Galtieri said:

"I could not tell the United States Government what I was planning to do with the Malvinas because they would have stopped me. I hoped they would maintain an equi-distant position. This does not mean that, based on the evaluation made by our "intelligence services," we did not speculate that they could adopt another position, but, as I have pointed out, I never expected them to take the one they did in the end... But I certainly can say that had we had the certainty that the United States was going to take the position it finally did, we would

not have invaded. How could we imagine a war with the most powerful arsenal on earth--with the position taken by the United States, they practically declared war on us."

Galtieri's decision to take the Falklands/Malvinas is often described as irrational but it seems so only in retrospect. His expectation that the United States, thanks to its new, improved relations with Argentina, would sit on the fence throughout the conflict, was no more unreasonable than his apparent judgement that the British, already in process of dismantling their fleet, would not send a strong enough force into the South Atlantic to retake the islands. In the event, the United States did try to play the role of honest broker and there were certainly influential policy-makers in Washington who advised that we adhere to that position throughout the conflict rather than sully our relations with the Latin Americans in general and with our newfound ally in particular by declaring our support for the British. The problem with Galtieri's reckoning was not that it was far-fetched but that his total package lacked the contingency planning to enable him to respond, should his intelligence estimates prove inaccurately optimistic. The quick installation of thousands of troops on the island left little room for diplomatic maneuver. Moreover, the General had not prepared adequately to deal with a determined British attack on the Falklands/Malvinas, as we shall see.

Why would the Argentine "intelligence services" fail utterly to anticipate the painfulness of America's dilemma when confronted by a war between two of its allies: the oldest and most traditional, on the one hand, and the newest, on the other? How could those Argentine analysts ignore the possibility that the Europeanists' position would eventually triumph, especially since Alexander Haig, a former head of NATO, was Secretary of State? General Galtieri's statement that he believed that the Americans would have stopped him had they known what was afoot, and his refusal to answer President Reagan's first phone call in the early hours on 2 April, suggest that the Argentine failure to anticipate Washington's final response may have stemmed not from an intelligence failure but from Argentine policy-makers themselves. Nonetheless, it is worth noting in this context that the Argentine State Secretariat for Intelligence, SIDE (Secretaria de Informaciones del Estado), which is the intelligence service charged with evaluating foreign intelligence, concentrates its main efforts on counter-terrorism. Even where working abroad, where it maintains official liaison with the host country's intelligence and security services, its chief object is to keep tabs on Argentine subversives residing abroad. It therefore lacks the structure that would have enabled it to assess

foreign powers' intentions and thereby provide crucial guidance for Argentine policy-makers in this instance.

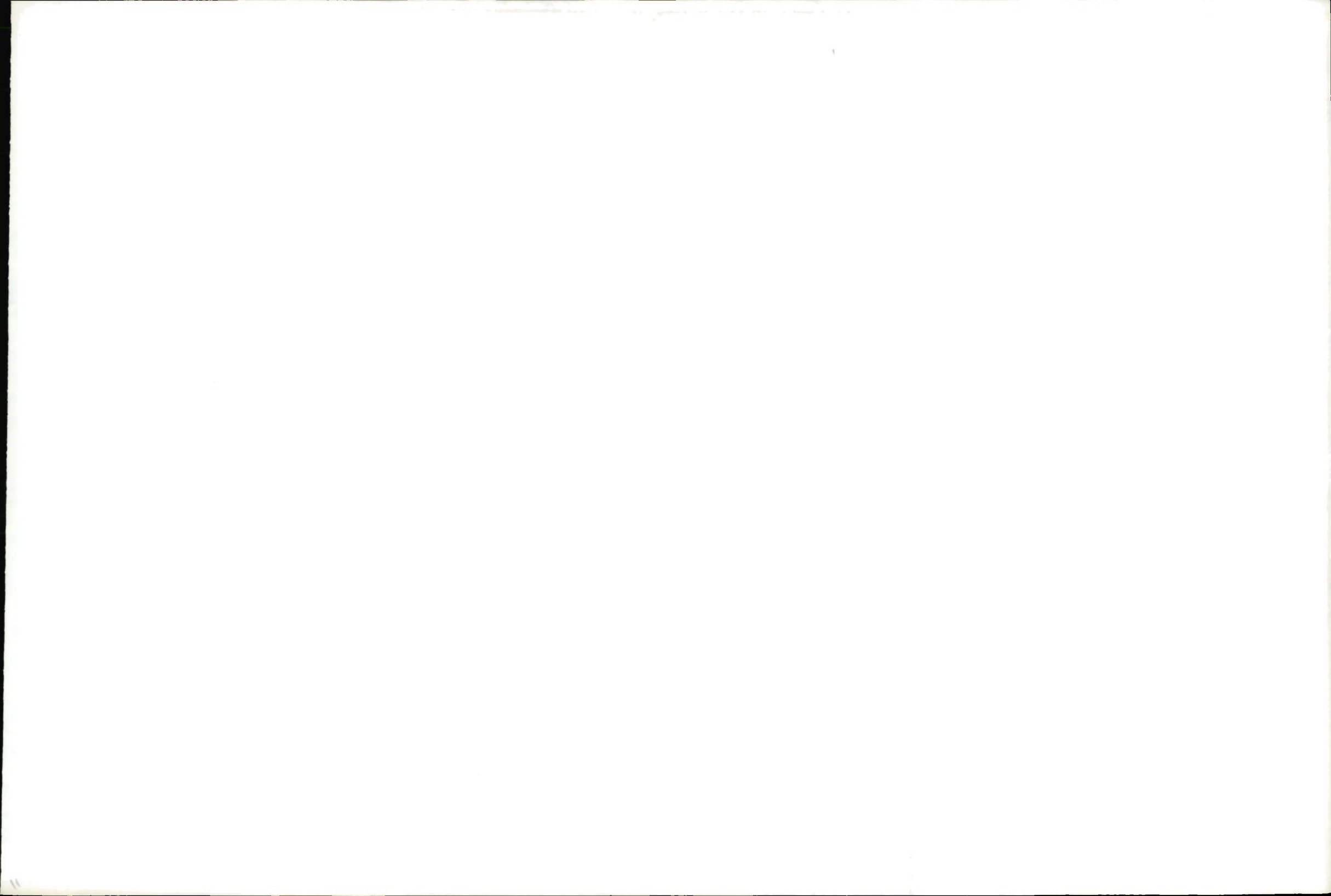
Failures of American diplomacy and Argentine intelligence were not the prime causes of the Argentines' debacle. To explain what went wrong for them requires an analysis of General Galtieri's preparations to retake the Falklands/Malvinas. We have his own word, surely not tendentious in this instance, that the original plan was to retake the islands in July, not in April, and that the plan was conceived only in January. In the secret interview quoted earlier, the General said, "The planning of the operation was ordered in January under the utmost secrecy, although the date of its execution was not set precisely....Plessl asked me how much time they would have to prepare the operation. I replied that they should set the Malvinas takeover for about July." The incident involving Sr. Davidoff and his scrapmetal dealers at Gritvyken in South Georgia, a spontaneous occurrence not staged by the military according to Galtieri, caused the date to be advanced to April. Moreover, the decision that the invasion would occur on the first, second, or third of April (they launched on the second for meteorological reasons) was made only a week before D-Day. This impulsive advance of the invasion by some four months clearly constituted a tactical error that had the gravest consequences for Argentina. Without it, more time would have been available to train the soldiers who would have to hold the islands, many of whom were raw recruits (a fact of which General Galtieri claims ignorance). More time would also have been available to acquire new arms that Argentina was in the very process of purchasing, so that the Argentine armed forces would have been far better equipped had the war begun in July as originally intended. In addition, the launching of the invasion in April reveals an utter lack of concern for minimizing Britain's ability to react. It suggests that General Galtieri was acting on the assumption that the British would not go to war at all but would satisfy themselves with some form of diplomatic response, such as an appeal to the United Nations, or perhaps with half-hearted harassment activity. As we have seen, this was not an entirely unreasonable assumption --though it failed to reckon with the iron will of Prime Minister Thatcher and the response of the British populace generally--but it was a risky premise on which to plan and execute a war. When Argentina struck, most of the British fleet was back home in Britain for Easter, and this greatly facilitated the rapid assembly of the powerful British task force that eventually sailed south. If Argentina had waited for only two more of the original four months, the fleet would have been dispersed, with a group of warships back in the Indian Ocean.

Bad planning, rushed timing, and the assumption that the British would not respond to the invasion in any serious way resulted in another fatal and unnecessary Argentine tactical liability. Their failure to extend the runways at Port Stanley meant that they could not operate their aircraft from the islands themselves but only from the mainland. The Air Force lost its potential superiority because it had to operate at a distance of four hundred miles from the Falklands/Malvinas themselves, leaving barely three minutes of over-flight time. The war might have turned out very differently had the air force operated within close range of the British task force. Argentine air superiority would have made the British landings virtually impossible.

Of course, had the Argentines been willing to wait for a full eighteen months before attempting to take the Falklands/Malvinas, they would have been fighting against a Royal Navy nearly denuded of all sea-based airpower. Both Britain's carriers, the *Hermes* and the *Invincible*, which proved indispensable in Britain's successful invasion of the islands, were scheduled for retirement and sale to Australia. Moreover, the Ministry of Defense had cancelled all plans and contracts for new carrier construction³. It may have been the case, of course, that given the shaky base of support the junta enjoyed at home, such a prolongation would not have been politically feasible. From a purely strategic viewpoint, however, it would have been most desirable.

Thus the Argentine army and airforce had to face the British under conditions much more disadvantageous than was necessary. The same might apply to the Argentine navy, which may have fallen victim to British disinformation. We all know how, after the sinking of the *Belgrano* on 2 May, the Argentine surface navy played virtually no active role in the war. There was good reason for this, as Carlos E. Zartmann, a retired Argentine naval captain, made clear in a recent edition of *PROCEEDINGS* (February, 1983, p. 87), published by the U.S. Naval Institute. He argued that two concurrent factors kept the Argentine navy in home waters, factors that no other navy had experienced in wartime before: nuclear attack submarines and electronic surveillance satellites, the first British, the second American. His view deserves quotation in full:

"The first (the nuclear attack submarines) posed a threat to the very existence of Argentine naval power, which was very difficult to accept because the conflict was limited in nature and possession of the islands at stake did not represent an objective upon which the survival of Argentina depended. The naval command had to weigh carefully the necessity of risking the destruction



of the nation's total small and costly surface fleet. Not to incur any unnecessary risks was a wise strategic decision....The second factor, U.S. Intelligence support to Britain, was the most important U.S. contributions to the conflict and one given while former Secretary of State Alexander Haig was still performing his "goodbroker" act. It proved to be decisive for the naval surface actions because it deprived the Argentine fleet of any chance of obtaining a tactical surprise over the British. (Admiral Woodward, the British on-scene commander, was quoted by the press as saying that he always knew exactly where every Argentine ship was, except the submarines.) British naval superiority was overwhelming, but U.S. support made it so lopsided as to become crushing. In such a situation one would not expect a fleet to go out only to be spotted by satellites and slaughtered by nuclear submarines that had no trouble in being at the right place at the right time."

Not only Admiral Woodward, but the British media in general made similar claims regarding the nature of satellite aid received from the U.S. The careful intelligence analyst or policymaker will not take media pronouncements as gospel. American sources do not corroborate the claim that the U.S. provided the kind of "real time" photocommunications envisaged in the statements made by Admiral Woodward and Captain Zartmann. What is more, a careful reading of a recent British public document suggests precisely the opposite.⁴ It notes that relaying live satellite pictures to Britain directly from the South Atlantic would have required a slight tilting of the American Discus satellite. Although the British considered requesting formally that we do this for them, they abandoned the idea when informal approaches met with a negative American response. The British nuclear submarines were a real enough danger but it appears as though they would have had to hunt for Argentine surface ships in the traditional manner rather than have them located in advance.

Of course, the British failed utterly to anticipate the Argentine invasion on 2 April. Was this failure excusable? Had General Galtieri stuck to his original invasion date, would the Argentines' preparations between April and July have revealed their intentions to the British? Maybe, but their loss of strategic surprise might well have made little difference, for Galtieri did not exploit the time advantage he had gained. In the face of mounting evidence to the contrary he clung stubbornly to the belief that the British would not respond with adequate force and there is every reason to think that he would have done so in July as well.

British intelligence, moreover, had already anticipated the possibility of a military confrontation after June. The Falkland Islands Review, produced for the British government by a distinguished investigative committee under the Chairmanship of the Rt. Honourable The Lord Franks, makes it clear that the timing of the action, rather than the fact of it confused British policy-makers. In a remarkable passage the committee writes:

"The Foreign and Commonwealth Office recognized clearly that the situation was moving toward confrontation, as is shown by the advice they gave their Ministers at the beginning of the year, notably in connection with the Annual Report of the Governor of the Falkland Islands. They believed, however--and their belief was supported by evidence--first, that Argentina would not move to confrontation until negotiations broke down; secondly, that there would be a progression of measures starting with the withdrawal of Argentine services to the Islands and increased diplomatic pressure, including further action at the United Nations; and thirdly--and the intelligence bore this out--that no action, let alone invasion of the Islands, would take place before the second half of the year."⁵

The confidence of this last assertion suggests that British intelligence possessed some definite information stemming ultimately from General Galtieri's secret January meeting, where the Malvinas takeover was set "for about July". The Franks Report attributes to possession of such intelligence the British lack of response to a variety of early warning signals that developed into the April 2 assault. In fact, with such foreknowledge, British inactivity becomes less comprehensible.⁶ Under the circumstances, mere prudence should have led them, regardless of the timing, to reinforce the tiny forty marine garrison at Port Stanley, or to move some troops into Ascension Island for rapid deployment in case of an emergency, or quietly to increase their naval presence in the area as the Labour government did in 1977 when faced with a similar threat. The British took none of these actions and so wasted the high quality of their intelligence effort--if the Franks Report is to be believed. So Britain failed to avoid what Churchill surely would have called "an unnecessary war".

While the United States gave no false signal, it did not send out any clear or strong enough to deter the Argentine attack. And it could have deterred that attack. Galtieri was obviously indulging in hyperbole with his claim that the United States "practically declared war on us," but his statement that

he would not have gone to war had he known what the U.S. final position would be rings true. The President could have prevented the war with an eleventh hour threat on 2 April to support the British with direct military action. We chose instead a balancing act. The British in turn, even after their experience in two World Wars, appeared still not to have learned that an modicum of deterrence can be worth torrents of blood. Their uncompromising negotiating position was never matched by their military assets in the area.⁷ As they reduced the size and capabilities of their navy, they decreased their adversary's perception of the risk it ran in using force to regain the island. Having ignored all the early warning signals, they emerged on 2 April with a policy that lacked any supporting strategy. Worst of all, General Leopoldo Galtieri convinced himself that the world was precisely as he wanted it to be. Throughout the war and after, he clung to a comforting but distorted picture of reality. Even now he appears to believe that his country's humiliation belongs on the shoulders of others.

FOOTNOTES

1. See the excellent new article by Vojtech Mastny, "The Soviet Union and the Falklands War," Naval War College Review, July/August 1983.
2. Robert Harris, "The Falklands Inquest: The Key to the Mystery of the Government's Failure to Act Sooner," The Listener, 24 June 1983.
3. Gerald W. Hoppie, "Intelligence and Warning: Implications and Lessons of the Falkland Islands War," a paper presented at the 1983 Annual Meeting of the International Studies Association.
4. "The Handling of Press and Public Information During the Falklands Conflict," House of Commons First Report from the Defense Committee, Session 1982-83, Vol. I, pp. XXV-XXVI, para. 56.
5. p. 80, para. 294.
6. Some American intelligence analysts find British inactivity so inexplicable that they do not believe the Franks Report in this instance. While the author allows that there may be omissions in the report, he rejects the view that there are purposeful misstatements.
7. For the British negotiating position, see Falkland Islands Review, pp. 20-26, paras. 71-93.

CURRENT LAND CONFLICTS IN SOUTH AMERICA

By

Dr. Carlos Lopez

South America is a continent that has been much maligned in history and in public opinion in the English speaking world. It is often thought of as a place where chaos, disorder, corruption, violence and anarchy prevail. The facts, however, point to a very different reality. The absence of a major war during the last 100 years makes the South American continent stand as a leader among less developed areas in preserving peace and in the establishments of permanent and legitimate regimes.

Hopefully, the current wave of authoritarian and non-democratic regimes is but a temporary situation that will soon return the traditional democratic and representative regimes in which law, order and democracy will prevail. Furthermore, it is expected that countries such as Uruguay, Chile, and Argentina will have stronger governments, provide for wider participation, and establish long and lasting institutions that cannot be corrupted or destroyed by outside influences.

This peaceful era, which no other continent in the World has enjoyed, was due to:

1. The influence of the United States: Pax Americana
2. The willingness of quarreling parties to submit to outside arbitration.

The Falkland Islands War has suddenly interrupted this condition and we can only hope that, because this was an armed conflict with an outsider, the nations of South America will continue to settle their dispute by peaceful means.

There is no question that the influence of the US in South America is at a low point in history. Argentina's invasion of the Falkland Islands and its subsequent refusal to withdraw from the occupied area is really the best example of the weakened role of the United States in the Inter-American system. It should be clear that the "Pax Americana" is at an end. If the United States provided the stabilizing force in the past, the threat, or the force, is no longer there.

Still, the official United States policy towards Latin America continues to be:

1. The promotion of democratic institutions,
2. Economic development to alleviate poverty, disease and suffering
3. Security so that a shield can be built under which these changes can take place.
4. Promotion of peaceful solutions to conflicts that may arise within the country or in the international area.

Conflicts among South American nations will have to be resolved among themselves. Each country will have to rely not only on its own military strength but also on the diplomatic skills that would permit it to draw strength from local allies.

Professor John Child has recently pointed out that although in the past most Latin American conflicts have been territorial or boundary disputes, in the present and the future, the predominant disputes would involve ideologies, resources and leadership. This may be true of Central and even North America, as we are now witnessing in Nicaragua, El Salvador and Guatemala, but in South America the immediate conflicts seem to be over territories and undefined boundary lines.

Long range geopolitical thinking may foresee conflicts of domination of resources, as, for example, powerful countries which are short of energy. Current disputes can be summarized as follows:

1. The disputes between Peru and Ecuador which may draw in Brazil and Colombia.
2. The aspirations of Bolivia to obtain an outlet to the Pacific Ocean, which although aimed at Chile, may involve Peru.
3. The Chile/Argentina conflict of the Southern Islands.
4. The Brazil/Argentina disputes, which may involve a struggle for leadership.
5. The Antarctic.

Outside influences and concerns, such as the Falkland Islands, the possible attempt of Brazil to influence Western Africa, or the dispute between Guiana and Venezuela, have been included. The last one, even though it involves two South American countries, belongs to the Caribbean basin and it should be discussed under that topic.

I. Peru and Ecuador

Ecuador is a small country that has lost most of its colonial territory to his neighbors: Peru, Colombia, and to a certain degree, Brazil. The basic problem area is the so-called Amazonic Triangle, an area limited by the Eastern slopes of the Andes, the border between Colombia and Ecuador and the Amazon which in this area is called the Marañon. It is a large area, roughly 100,000 square miles of thick jungles, sparsely populated.

Ecuador lost the area to Peru after an armed clash in which the Peruvians were able to occupy not only part of the Amazonic area in dispute, but also part of the seashore alongside the Del Oro province. Unfortunately for Ecuador this incident took place in July of 1941 and by the time the conflicting parties had settled their differences under the pressure of WWII, Ecuador accepted Peruvian occupation of the Amazonic territory in exchange for Peruvian withdrawal from the coastal area. A protocol was signed in Rio in 1942 and this document was held valid until 1960 when Ecuador declared it invalid. Several armed clashes have taken place before and after that date and as recently as last month (March 1983) Peruvian and Ecuadorian soldiers exchanged fire in the disputed areas.

Although the possibility of finding oil in area is high, what is basically at stake is Ecuador's desire to become an Amazonic power and to be able to reach the Atlantic through this important river system. Ecuadorian geopolitical thinking sees Ecuador facing East towards the Amazon basin, dominating future oil fields that are seen as an extension of areas now under production. This position could come into conflict with Brazil's expansionist ideas towards future oil fields, while Colombian claims to the Amazon Basin could also clash with the Ecuadorian trend. Thus, Ecuador finds itself alone, surrounded by bigger and more powerful enemies.

The possibilities of arbitration are remote. Ecuador is unwilling to give up claim to an area that historically belongs to her. Patriotism, pride, and nationalism prevent the Ecuadorians from giving up even one inch of their territory. If anything they want to recover what they feel they have lost. On the Peruvian side, Peru sees the development of the Amazonic area as an immediate and important goal, the key to future riches, the road to a bi-oceanic power and also the source of pride rooted in patriotic and nationalistic traditions.

II. Bolivia's outlet to the Pacific

Most Bolivians are firm believers that the main reason for their underdevelopment is the lack of an outlet to the Oceans of the World. Technically speaking, this is, of course, nonsense. Nations without outlets to the sea, have become highly developed. Bolivia enjoys the use of a first class railroad to the coast, a secondary railroad to Antofagasta, and the port facilities of both terminals, all maintained at no cost to the Government of Bolivia.

Historical reasons however, weigh heavily in Bolivia's thinking, planning and actions. Although Bolivia never exercised true sovereignty over the territory, the province of Antofagasta was under nominal Bolivian control until 1879 when it was invaded by Chile. The bloody War of the Pacific involved Peru as well, and this nation lost the province of Tarapaca. Later Peru was forced to cede Arica to Chile. In a protocol, signed in Washington in 1929, Peru agreed to cede Arica and Tarapaca to Chile with the proviso that no part of former Peruvian territory could be transferred to Bolivia. This provision has seriously complicated all possible negotiations between Chile and Bolivia and although several solutions have been proposed, Chile has insisted on an exchange of territories, including maritime areas off the coast, which are expected to be compensated for in Bolivian land. One of the most ambitious projects was promoted by President Gabriel Gonzales of Chile in the 1940's and included the diversion of water from the Bolivian lakes to form a 3000 meter series of waterfalls that could be used for hydroelectric energy. These water rights would have been exchanged for a corridor. As late as 1975, Chile proposed to give Bolivia a corridor that included the Arica-La Paz railroad line with its corresponding maritime space in exchange for Bolivian territory, but again the proposal did not materialize.

Although Bolivians proclaim that an outlet to the sea is of the first priority in order to achieve proper economic development and integration with the rest of the Americas, the fact is that the conflict is based on ideological, patriotic and nationalistic reasons. Tensions rise and fall, according to the Peruvian attitude towards Chile, because Bolivia cannot think of fighting Chile alone. Since Peruvian/Chilean relations are currently at an all time high, it is doubtful that a solutions will come in the near future. Bolivia's own internal problems have prevented her from negotiating directly with Chile. Bolivian attempts to bring the questions to the attention of international organizations, have borne no fruit whatsoever. Unless Chile is willing to take the initiative again, there is little hope of reaching a solution.

III. The Beagle Channel Dispute

The Treaty of 1881 clearly specified that the Southern limit between Chile and Argentina, East of Meridian 68 degrees, 34' would be the Beagle Channel and all islands to the South of the Channel and up to Cape Horn will belong to Chile. Argentina, claiming that the Channel makes a curve and may have as many as three Eastern mouths, has claimed that the three islands East of Navarino belong to her.

After several unpleasant incidents Chile demanded that in accordance with the Arbitration Treaty signed in 1902 the question of the Beagle Channel Islands be submitted to Her British Majesty. Argentina agreed to arbitration and a Treaty was signed on 22 July 1972. Queen Elizabeth appointed a panel of five judges who studied the question and pronounced a verdict on 18 April 1977. The decision of the judges was accepted by the Queen and as referee she notified the two parties that the judges have unanimously agreed "that the islands of Picton, Nueva, and Lennox, belong to Chile together with islets and rocks near them."

Only after receiving the decision of the referee, did Argentina claim that the head judge, Sir Gerald Fitzmaurice, could not have acted fairly because he had been involved in certain claims against Argentina and because of the controversy over the Falkland Islands. Therefore, Argentina, declared the verdict "null and void" and started a veritable Cold War towards Chile, with methods and results which are well known.

The question was submitted to the Pope who appointed Cardinal Antonio Samore to find a solution. The Pope's decision, presented in 1982, has not been made public. The only version was published in an Argentinian newspaper and it appears to confirm the decision of the British Crown. Chile accepted the Pope's decision even if it meant losing part of what it had gained at arbitration, but Argentina has refused to accept the Vatican decision and continues to claim the islands territorial sea, and continental platform, all the way to Cape Horn, even though she has never exercised any sovereignty whatsoever in the region.

It is expected that the Argentinian government to be elected in October 1983, will take some decision in this matter. There is no way to anticipating what the new government's attitude will be in the Beagle question. It has been suggested that since accepting the Pope's decision involves "renouncing an integral part of the territory", only a duly elected congress can approve the decision and ratify a treaty that can put an end to the controversy. In the

meantime, tension at border crossing points, general animosity, and an unnecessary arms race between the two countries continues.

IV. Argentina and Brazil

The rivalry between Argentina and Brazil presents some very difficult facets and it is practically impossible to pinpoint exactly where the center of the dispute really lies. Historically, the two countries face each other with the same animosity with which Spain contemplated Portugal. Geographically, the two countries occupy the mainstream of the continent's two largest river systems. Politically, they have allied themselves with opposite sites, either internally, Brazil with Chile, Argentina with Peru; or externally, Argentina with a definite pro-axis attitude in WWII while Brazil was a staunch ally of the United States. But now, even beyond these historical and geographical differences, the rivalry for leadership in South America, especially in the vacuum left by the United States, has spurred both nations to assume the role of leader that has, of course, to displace the other.

There are really no border disputes between the two countries but the controversy for influence in the three buffer states (Bolivia, Paraguay and Uruguay) is acute. Similarly the race for hydraulic resources in the upper Parana, the attempts to control energy resources, such as the Bolivian oil and gas fields or such mineral resources as the iron deposits of Paraguay, and even the cultural penetration in Uruguay, constitute the source of some serious concern for the peaceful and friendly relations of the two countries.

A conflict between the two largest countries in South America would, no doubt, drag along the buffer states and may conceivably even involve nations that do not have common borders with Brazil, such as Chile and Ecuador.

V. The Antarctic

Chile and Argentina claim Antarctic Quadrants which may be the source of future conflicts not only among themselves, but with European powers: Great Britain, Poland, West Germany and the USSR maintain bases on the territory. In addition, Brazil, a country that maintains no Antarctic bases, cannot accept Argentina's intention in the Southern Ocean and it has come up with its own theories on Antarctic claims. It is called Defrontacao: any country whose coast faces the Antarctic, will have rights on the opposite shores of the frozen continent. Brazil has not yet made a definite claim but, in signing the Antarctic Treaty of 1975, declared:

Brazil, by virtue of owning the most extensive coast in the South Atlantic, a coast which in her greater part is open to access from the Southern Continent, has direct and substantial interest in the Antarctic.

Brazil has also declared as territorial sea a belt of 200 the Antarctic Peninsula are far from ideal,--in fact some don't even recognize each other,-- nothing but goodwill and full cooperation has been the norm in the Antarctic. Rescue operations have assumed full international cooperation. Visits during the winter months with exchange of gifts, movies and records constantly take place. Recently, when a ship was having difficulties unloading supplies, the landing barges from a rival base came alongside to help. The fact that the two governments involved do not have diplomatic relations was ignored.

The Antarctic Treaty has been a powerful instrument in preserving the current status quo in the frozen continent. The bonds of friendship among the nations with Antarctic bases is strong and we can expect that the peace, friendship and cooperation, will continue in the future.

In summary, we can expect South America to continue in a state of balanced, though armed, peace. The linchpin of South American equilibrium is the Argentinian-Brazilian rivalry for leadership. As long as the United States remains committed to Central America first, the Caribbean second, the South America as distant third, the vacuum will be filled by the two largest countries in a race that seems to point to Brazil's early, if somehow limited, superiority.

Although, the OAS peace keeping missions have been left in a shamble after the Falklands War and its prestige is at an all-time low, we can expect that informal negotiations, with leadership provided by third parties, all spurred by common sense and a desire for peace, will maintain these trouble spots in a status quo that may last many, many years.

THE IRAN-IRAQ WAR

By

Dr. Edmund Ghareeb

This paper will focus on the causes of the Iran-Iraq War and its possible implications for the two countries.

The quarrel between Iran and Iraq has its roots in historic, territorial, ideological, and strategic political differences between the two countries. Some historians see the roots of the present conflict in the struggle between the Ottoman and Persian Empires which manifested itself as a dispute opposing Sunnis (Ottomans) and Shias (Persians), and in the territorial conflict over the borders. Others see it in terms of Persians vs. Arabs, and trace the origins of the conflict between the two people to the Arab-Muslim invasion of Iran in the 7th Century which converted Iranians to Islam and to the Persian-Arab struggle preceding it. During the Muslim invasion of Persia, al-Musthafa ibn Haritha, the leader of the Arab forces, decided, as a good omen, to take his troops to Dhi Qar, the site of a major battle in which Arab tribes defeated a Persian army before the advent of Islam. The Arab-Muslims went ahead to defeat the Sassanid army at Qadisiya in 637 A.D. The Iraqis are describing the current struggle as Saddam's Qadisiya. Still other historians, including some Iraqis, trace the conflict to the struggles between the Babylonia and Assyrian dynasties of ancient Iraq against the Persian Empire. This historic conflict has been accentuated in modern, nationalistic terms.

The territorial dispute over the Shatt al-Arab and the land border area has been and remains a persistent source of tension between the two countries regardless of the nature of the regimes in power in either Baghdad or Tehran. The roots of this conflict can be traced to the struggle between the Ottoman and Persian Empires. Under the 1914 treaty of Constantinople Iran conceded sovereignty over Shatt al-Arab except for a 3-mile area near Abadan. Following Iraq's emergence as an independent state, Iran began to question the agreement claiming that it was made under pressure when Iran was weak and had no choice but to accept. A new treaty was reached with the help of Turkey in 1937 which gave sovereignty over the Shatt to Iraq except for a small area near Abadan and Khuramshahr.

Following World War II, however, Iran began to raise the issue anew and asked that the Shatt be divided on the basis of the "thalweg." Iraq's concern over the issue was manifested in 1951 when it prepared military plans with British help to invade Khuzistan. It is believed that Iraqi military leaders

used these plans--with some modifications--in their invasion of Khuzestan in 1980.

The presence of two monarchist and pro-Western regimes in Baghdad and Tehran alleviated the tensions, especially after the rise of Gamal Abdul Nasser and the growth of Arab nationalist sentiments in the region.

Relations began to deteriorate, however, following the overthrow of the Hashemite monarchy and particularly after the return of the Ba'th party to power in Baghdad in 1968.

The quarrel between the Shah's regime and the Ba'thists was deep and complex. It was one between a conservative, non-Arab monarchy whose ruler was seeking to preserve his throne and to play a dominant role in the Gulf, and an Arab nationalist and socialist regime aiming at maintaining itself in power, spreading its ideology to other Arab countries and thwarting Iran's ambitions in the Gulf. Ties were further complicated by Iran's support for Iraqi Kurdish secessionist Mulla Mustafa al-Barzani and by Iran's involvement in conspiracies aimed at ousting the Ba'thists. The Iraqis in turn backed religious as well as secular opponents of the Shah and gave financial and military aid to Baluchi, Kurdish and Arab secessionist movements.

The situation reached a new low when Iran began to escalate its aid to Kurdish rebels who were placed on the defensive following a successful Iraqi military campaign in the spring and summer of 1974. Such operation threatened to lead to direct and open war between the two sides with serious consequences for both, as well as the entire world. An Iraqi-Iranian war could have meant, in addition to the heavy human and material losses for both countries, the shelling of each other's oil wells, the danger of expanding the conflict to other countries, and the consequent threats of foreign intervention by the industrialized countries, seriously jeopardized by a Gulf oil cut-off.

The growing seriousness of the situation led to mediation by President Sadat, King Hussein and President Boumedienne. The mediation efforts succeeded and on March 6, 1975, Saddam Husain and the Shah signed the Algiers agreement which netted gains for both sides. As a part of the agreement, Iraq conceded Iranian claims along the Shatt al-Arab and ended its support for Baluchi, Arab and Persian dissidents inside Iran. In exchange, Iranian, U.S., and Israeli support of the Kurdish rebellion was ended and some 400 square kilometers of the land frontier was to be returned to Iraq.

From 1975 to 1979 Iraq followed a friendlier but nevertheless cautious policy toward the Shah's Iran as both sides cooperated to establish a strong front concerning oil prices within OPEC.

Following the Shah's ouster, Iraqi leaders welcomed the statements issued by Iranian Prime Minister Bakhtiar concerning the declaration that it would no longer play the role of Gulf policeman. Foreign Minister Hamadi praised this stand as a "positive step toward the establishment of cordial relations toward the Arab Gulf states." Iraqi leaders also praised the Iranian Revolutionary leaders' support on the Palestinian issue and continued to express hopes for cooperation with Iran after the fall of Bakhtiar's government. On February 13, 1979, Iraq sent a memorandum to the new Prime Minister Mahdi Bazargan stressing Iraq's desire to establish "the strongest fraternal relations on the basis of respect and non-interference in domestic affairs."

Iraqi hopes for better ties did not materialize. Deep conflicts of national interest exist between the two countries regardless of the nature of the regime in power. The conflict was further sharpened by ideological antagonism between the two countries. Iraq is ruled by a secular, nationalist (pan-Arab) regime. Iran, on the other hand, is run by a theocratic, internationalist (pan-Islamic) government.

Iran's leaders made no attempt to conceal their intention to export their revolution to other Islamic countries. Iraq did not trust Iran's talk about exporting the revolution since this could not occur except through interference in the ethno-sectarian structure of the society. Iranian leaders have explicitly called on Iraqi Shiites to overthrow the Ba'thist government whose leaders they portray as "evil and atheist."

The Iraqis in turn have accused Khomeini of being a "turbaned Shah" who is using the cover of Islamic ideology to cover "Persian racist designs" to destabilize and dominate the Gulf region. Iraqis see their role in challenging the Iranian Revolution as one not only aimed at defending their own regime, but as defending the "Arab character of the Gulf" as well.

The bad blood between the leaders of the two regimes may also have personal overtones. Iraq expelled Ayatollah Khomeini after he began to escalate his activities against the Shah in the spring of 1978. Khomeini and his followers interpreted this move as a hostile action against their revolution and harbored resentment against Iraqi leadership, stressing that every opponent of the Imam must be punished.

Propaganda campaigns began in the spring of 1979 between

the two sides. Relations began to deteriorate rapidly in the fall of 1979 and the winter of 1980. Iraq accused Iran of supporting communist and Kurdish opponents of the regime and of financing and arming Al-Dawah Islamic party to commit acts of sabotage and assassinations in Iraq. Iran in turn accused Iraq of supporting Arab, Kurdish and anti-regime Persian groups inside Iran.

The Iraqis made several attempts to resolve their differences with the Iranian leadership which led nowhere. They based their approach on the following program: an end to Iranian interference in Iraqi internal affairs, assertion of Iraqi sovereignty over the Shatt al-Arab, the return of the Greater and Lesser Tumbs and Abu Musa islands to the U.A.E., and recognition of the national rights of the Arab minority in Khuzestan. Several meetings took place between Iraq and Iran to resolve the conflict, all of which failed.

The situation reached a new level of threats following the escalation of border disputes between the two sides which continued throughout the spring and summer of 1980. On September 22, Iraq ordered its troops to invade Iran.

While it is difficult for anyone to know what were Iraq's motives for the war, it is safe to assume that Iraq's war with Iran can only be understood in terms of Iraq's geographic position, ideology and Iraqi national interests, and that a year and a half after the Iranian revolution it seemed to Iraqi leaders that: (1) it was not possible to talk rationally to a regime whose leaders speak only of the transnational impact of Islam and the need to export the revolution; (2) the time was ripe to redress their grievances over the Shatt al-Arab since the Iranians refused to abide by the other terms of the 1975 agreement; (3) Iran's attack on border posts and towns of the infiltration of arms and saboteurs into Iraq had to be stopped; (4) the widespread belief that the Iranian army was divided and that its arms were becoming obsolescent, the leadership was divided and that if the Iraqis could score some quick victories the Iranian regime might crumble and bring to power a regime with which the Iraqis could co-exist. It is highly unlikely, however, that the Iraqis had intended to push much deeper into Iranian territory; (5) waging what they believed to be an inevitable conflict on Iranian instead of Iraqi territory; (6) serving notice to friends and foes in the region that Iraq has a regional role and security interests and was determined to protect them.

If the Iraqi leaders had hoped for a quick and decisive victory over Iran then they were quickly disillusioned. The Iranian regime used religious as well as patriotic sentiments to mobilize the population around the regime and to drive the

Iraqi forces from Iranian territory. But if one of Iraq's goals had been to check the spread of Khomeini's brand of Islamic fundamentalism to Iraq and other Arab states, then this has at least for now been achieved.

So today, after more than two and a half years of war, we continue to see two armies fighting a static war with no major movement on either side. There have been some major exceptions when the Iranians, using human wave tactics, were able to achieve last year important changes on the ground and to dislodge the Iraqi troops from the areas they occupied during the first week of the war. But the predicted Iraqi collapse did not occur. The attempts by the Iranian army and Pasdaran to advance into Iraq were successfully repulsed by the Iraqis who inflicted massive casualties on the Iranians when they made their major push near Basra and in the central sector of the front.

Today, both sides appear to be fighting a war of attrition on the border, with Iraq following in recent months a defensive strategy. Iraq's new strategy stemmed from the need to avoid paying a heavy price in blood for lands that they are eventually prepared to return to Iran in a settlement of the hostilities. This may also explain why they did not make a determined push to occupy Ahwaz, Dezful and Abadan during the early days of the war. They had hoped that their occupation of large areas of Iran might lead, if not to the fall of Khomeini regime, then to force the Iranians to negotiate a solution to the conflict, which would require a promise by the mullahs not to interfere in Iraq's internal affairs and to redress grievances over the borders. This view led the Iraqis to follow a defensive strategy which reduced their maneuverability while they were occupying large areas inside Iran. This strategy has shown that it was more effective when the Iraqis used it to prevent any Iranian penetration into and occupation of large Iraqi territory. The motivation of Iraqi troops defending their own land is much higher than when they were fighting a static war for a territory that was to be returned to Iran after the end of the war. It also explains Iraq's attempts to insulate the majority of its population from the ravages of the war.

On the internal front it appears that while the government continues to emphasize developed, it is no longer trying to isolate the population from experiencing the economic impact of the war. Instead, the government is mobilizing public support and preparing for a long war. And while the bulk of the Iraqi people do not seem to be overly enthusiastic about the war, they apparently realize nevertheless that their government is seeking negotiations and a peaceful settlement while it continues to prosecute the war.

A number of factors have helped the regime gain wide public support for its efforts. These include Saddam Hussein's highly visible and carefully orchestrated role of pater-familias who is constantly making inspection visits to the villages and towns of Iraq to win the hearts and minds of the average Iraqi and the failure of the war to affect daily life in the cities with the exception of Basra and the abundance of food and consumer goods. Iraqis closed ranks following the disclosure that Israel was sending spare parts and arms to Iran. This trend even increased following Israel's bombing of the Osirak reactor. The Iraqi regime was also helped by the election of Ismet Kittani, an Iraqi Kurd, to the presidency of the United Nations General Assembly in 1981.

Nevertheless, the war has also had some negative side effects on Iraq. The damage to the loading docks and pumping stations has been heavy. For example, the industrial complex at Khor al-Zubain is believed to have been heavily damaged. The war also constitutes an enormous drain on resources and manpower. It has already put serious crimps on the country's resources and frustrated the ambitious development plans. Oil revenues have been severely hit and are expected to have dropped to about \$15 billion in 1981 and to about \$10 billion in 1982, which led to Iraqi borrowing from other Gulf states. Kuwait has lent about \$7 billion and undisclosed amounts by others. The war has already led to a shift in priorities by increasing the emphasis on repairing damage and on projects which are needed to help the war, such as roads and communications, and giving a freer hand to the private sector as long as it continues to function within the overall government umbrella. Iraqi officials have admitted that the war has affected revenue but "if it does not take too long we will not suffer."

Following the Iranian revolution and the war, many experts forecast serious consequences for the regime in Baghdad, focusing on the ethnic and sectarian tensions within the society and to the emergence of a coalition against the regime. At present, such a prognosis appears unlikely to come true because Iraq's regime is different from the Shah's Iran in the following way: Iraq is led by a well-disciplined and well-organized political party with ideological content whose members and partisans reach close to 1.5 million and whose security apparatus is well run and ready to take action against any opponents of the regime; the Iraqi regime has dealt firmly with corruption at all levels.

Iraq had also followed a policy of spreading the benefits of the oil wealth to the people and of embarking on long and short range development programs.

Nevertheless, following the start of the war and Iraq's inability to win a decision military victory over Iran, some analysts predicted the collapse of the Ba'thist regime and the spread of the Islamic revolution to Iraq, other predictions included a governmental overthrow either by a man on horseback or a destabilization of the regime by various opposition groups.

Loose coalitions of Kurdish, Communist and religious fundamentalist opponents of the regime exist. But in spite of the opportunity that the war has offered to these groups, they have, so far, failed to pose any serious internal threat to the regime. The reasons for this development are obvious. The Ba'thists have embedded themselves deeply in various sectors of Iraqi society. In fact the most serious threats to the stability of the regime during the past decade have come from within the ranks of the Ba'th party itself.

And while the Communist Party also has deep roots in Iraqi society it was greatly weakened by government purges, inter-party factionalism, dependence on the Soviet Union and the Ba'thist ability to implement some of the social programs previously advocated by Communists.

Iraq's granting of a limited autonomy to the Kurds, its tough security measures, and the huge development schemes taking place in Iraqi Kurdistan have gone a long way towards stabilizing the Kurdish demands for autonomy to improve its position vis-a-vis its own Kurds and to undermine any appeal that Talibani and Barzani factions may have by pointing to their ties with the Khomeini regime which has refused to offer any recognition of Kurdish national rights and continues to wage a harsh campaign against its Kurds. Iraqi religious leaders do not enjoy the support or the drawing power of their Iranian counterparts. Generally speaking, Iraq's youths are better educated and more secular than Iran's.

The opposition has, in fact, shown remarkable disunity. Tensions and mistrust exist between the religious fundamentalists and the more secular opponents of the regime. In addition, a mini-war appears to be taking place between Barzani and Talibani supporters.

In addition, Iraqi Ba'thist leaders have since their return to power exhibited the will and the ability to rule. Saddam Husain, who has shown a gift of maneuvering and timing, has built the instruments of power and institutionalized them to help the party to remain in power in one of the most difficult to govern countries in the Middle East. the regime has balanced the tough security measures with visible attempts to win public support by pushing modernization, development and a better standard of living for the average Iraqi.

In Ba'thist, the regime appears to have tempered its long term ideological goals with short term programs. It has exhibited a combination of constant strategic goals and flexible tactics which have served the regime well in the past. Hussein has also shown a capacity for command, self-control and the ability to make difficult appraisals.

In its war with Iran the regime faces its most difficult threat to date. While it is early to predict the future impact on the regime, Hussein's ability to maneuver, his sense of timing and his demonstrated mastery of manipulating domestic politics are likely to allow him to survive this test. Since it appears to be difficult to achieve a decisive military victory in the war, Husain needs to reach a political settlement that will not sacrifice or impair his political power. If this occurs, it is likely that Iraq will continue to push economic development at home, regional economic integration with the other Gulf states, a non-aligned foreign policy and a greater consensus which would allow Iraq to play the credible regional role its leaders aspire to. But if a facesaving settlement of the war is not achieved and if the losses continue to mount and no end to the conflict appears in sight, the regime could face some serious challenges to its survival.

For Iran the prolongation of the war has become a function of the Iranian political situation. The government has used the war to unite the Iranians around it by using nationalistic as well as religious sentiments, to maintain its ideological motivations, to put off questions about its failure to come to grips with the economic problems facing the country, and to justify the strengthened security measures and heightened repression aimed at the Mujahidin Khalq, the Kurdish rebels and other opponents of the regime. Consequently, it is highly unlikely that Iran will respond to the calls for negotiations by Iraq, the Muslim Conference, and the non-aligned movement at least as long as Ayatollah Khomeini continues to be the decision-maker in Teheran.

The current situation does not appear to pose any serious threat to the two regimes. The Iranians appear to have overestimated the vulnerability of the Baghdad government as the Iraqis earlier overestimated the vulnerability of the Teheran government. It is likely that the stalemate will continue unless the war is prolonged considerably. The Iranian advantages of large population and geographic depth which benefitted the Iranians during Iraq's occupation of large areas of Iranian territory appears to have been neutralized by Iraq's better organized and more mobile forces. In addition the motivation of Iraqi troops has been greatly heightened since they are no longer fighting a static, defensive war on

territories they know will be returned to Iran, but are, instead fighting to defend their families and to preserve the territorial integrity of their own country.

The overall consequences of the war have been very unfortunate for the two sides. The human and material costs of the war have been very high. Great resources which could have been put to better use have been squandered. And while the material and human losses of Iran (Iranian casualties are estimated at about 100,000 dead and 250,000 wounded) far outweigh those of Iraq, nevertheless, Iraqi casualties have been undoubtedly deeply felt in a country of 13 million where the government has consciously followed a policy seeking to limit casualties.

What is the likely outcome of the war? The failure of most analysis to predict the outbreak, development and consequences of the war does not encourage future predictions, the war has been full of surprises and it may still hold some others in store.

The current assessments about the future of the war vary according to analysts' biases and points of view, but some of the scenarios put forward by some analysts include:

- An Iraqi defeat and the establishment of a fundamentalist government in Baghdad that is closely tied to Teheran. Another variation of this scenario is a military takeover in Baghdad which might facilitate negotiations to end the war. It is highly unlikely that such scenarios will become a reality because of the internal factors cited above. In addition the immense consequences of an Iraqi defeat for the other Gulf states and for the Arab world as a whole make it highly unlikely that these states would stand idly by and allow Iraq to be fragmented occupied or dominated by Teheran.
- A second scenario envision the collapse of the clerical regime in Teheran as a result of the growing problems facing the country. Proponents of this view point to heavy economic costs facing Iran as a result of the 4-5 million unemployed, and the 2-2.5 millions, mostly professionals, who have fled the country since the revolution. They also point to the economic as well as human and political costs of the increasingly repressive campaign against internal opponents such as the Kurds and the Mujahidin Khalq. Compounded by the high casualty figures and displaced persons (about 1.5-2 million) caused by the war it is argued that these hardships could lead to a leftist or a military takeover in Teheran. It is highly unlikely that such an outcome could take place at least as long as Ayatollah Khomeini stays alive. The

left is not believed to be in a position to seriously threaten the regime and the government has established and institutionalized the pasdaran to prevent suspect military from taking such action. Iran's geographic size, huge resources and large population are likely to help the regime to absorb the shocks of the internal and external problems. But the continued drain on human and material resources and the logistical problem Iran will face if it continues to carry the fight inside Iraq will undoubtedly affect its ability to continue the war. The failure of Iran's recent offensive and the huge losses suffered during the Basra battle have forced the Iranian leadership to reassess its tactics.

- A third and more likely scenario is that matters will end up as they were prior to the outbreak of the war, with neither side able to achieve a decisive victory. the level of fighting would scale down to sporadic clashes or be halted without reaching a peace treaty. Such an outcome will indicate that the frontier between the Arab and Iranian worlds will remain an active or tacit *cassus belli* particularly if the current Iranian regime consolidates its position and is able to pose a legitimacy challenge to the other governments in the region.
- A fourth scenario predicts that the two governments following Khomeini's death will come to the realization that neither can emerge as a victor and that their respective national interests require putting an end to this costly squandering of their human and material resources. Consequently, the two sides will be able to sign a new peace treaty along the lines of the 1975 Algiers Agreement.

For the immediate future it is likely that Iran will continue its efforts to defeat Iraqi forces and to destabilize and overthrow the Ba'th regime. For its part Iraq is likely to continue its attempts to reach a peaceful end to the conflict that would not harm Iraq's national interests while continuing the war to convince Iran to come to the negotiating table.

But whatever the immediate outcome of the conflict the question over the Shat al-Arab and land boundary, unless a fair solution is reached, is likely to give rise to strong, if intermittently hidden pressures by one side or the other. In addition questions will remain about the roles of Iran and Iraq in the Gulf as well as the impact of nationalist and religious fundamentalist consciousness and activity, particularly if the clerical regime in Teheran solidified its power which suggests an extended and complex future for relations between the two countries.

IRAN-IRAQ WAR: MISCALCULATION AND MADNESS

By

Dr. Assad Homayoun

"When the army engages in protracted campaign, the resources of the state will not suffice..."

Sun Tzu.

Brief Background:

For two and a half years, the "trial of strength of the moral and physical forces" between Iran and Iraq has been continuing. Since the World War II this has been the most dangerous, costly and at the same time stupid war we have ever witnessed.

Border differences between the two countries go back to a period when there was no Iraq and territory now called Iraq was part of the Ottoman Empire. In the 16th and 17th Centuries, the Persian and Ottoman Empires extended over most of Southwest Asia. The conflict between the two empires began in the early 16th Century, when Shah Ismael founded the Safavid Dynasty. Between 1602 and 1627, Shah Abass, the Great concluded several successful campaigns against the Ottoman and occupied the provinces of Baghdad, Kirkuk and Mosul. The war ended a few years later and the Treaty of Zohab was concluded between Persian and Ottoman Empires in 1639. Until World War I, conflict between the two continued and several treaties were concluded; but the question of boundaries was never resolved. During World War I, the Ottoman Empire disintegrated, and by the end of the war Britain was in control of the territory now called Iraq and a new kingdom was created. In 1932, Iraq was admitted to the League of Nations and achieved full independence. Consequently, boundary disputes between Persia and the Ottoman became Iran-Iraq problem.

A key dispute between the two countries centered on Shat al-Arab, a narrow body of water formed by confluence of the Tigris, Euphrates, and Karun rivers at the head of the Persian Gulf. In 1937, Iran reluctantly accepted a treaty which was initiated by British Admiralty. Under the Iran-Iraq Treaty of 1937, which was written largely under British auspices, the waterway came under Iraqi sovereignty. Iran never fully recognized the 1937 treaty, which had been imposed upon her. So long as Iraq was under Hashemite rule, both Iran and Iraq avoided confrontation. The coming of General Khassem to power in Iraq served to intensify the crisis of Shat al-Arab and also

another issue, namely the Kurdish rebellion, was added to that and those two issues became sources of conflict between Iran and Iraq. In March 1975, the Shah and Saddam Hussein met in Algiers, signed an agreement, and both contentious issues of border and the Kurdish issue were resolved. The main provisions of the agreement were that:

- A. Iran would abandon support of the Kurds in return for Iraq abandoning subversive activities against Iran.
- B. Iraq accepting the Thalweg principle for the whole of Arvand Rud (Shat al-Arab), which separates the two countries. The 1975 agreement worked remarkably well between Iran and Iraq until the upheaval in Iran.

After the Revolution in Iran:

With the downfall of the Shah and the coming of Ayatollah Khomeini to power in Iran, President Saddam Hussein was disconcerted by the Iranian revolutionary regime which was trying to export revolution to neighboring countries, including Iraq with 55 to 60 percent Shiite population out of 14 million. The Iranian regime called on religious Iraqis to rise up and overthrow the Bacathist regime of Baghdad. Tension and provocation between Iran and Iraq existed prior to the Algiers agreement and there had been several relatively important border clashes. But the Shah and Iraqi leaders never thought to engage in a war which they knew would be very dangerous and never had Iraqi leaders thought of invading Iran.

President Saddam abrogated the 1975 agreement in mid-September 1980, and Iraq's attack actually began September 12, with thrusts across the border. It has been said that invasion was the response to several months of Iran's provocation, but the war indeed started by the misjudgment of President Saddam, who initiated an attack to take advantage of disorder in weak, leaderless Iran, whose military and civilian elite were destroyed by pogrom and ruthless execution. Prior to the war, more than tens of thousands of military were purged either by execution, forcible retirement, or they left the country and went into hiding because their lives were in danger. Before the Iraqi attack on Iranian territory, Ayatollah Khomeini and his clergy followers, in the name of God attacked Iran from inside, destroying Persian civil, cultural, military and security institutions, including the unique pool of Persian talent who was forced out of the country. That is why President Saddam found the situation fit for materialization of his old dreams, and Khomeini's provocation was also a good excuse.

Saddam Hussein's motive was indeed:

1. to diminish prestige of Ayatollah Khomeini and put an end to his political life;
2. to enhance his prestige in the Arab world;
3. to achieve hegemony in the Persian Gulf after the vacuum created because of the downfall of the Shah;
4. to take control of three strategic islands (Tomb, Greater Tomb and Abu Mussa) at the head of the Persian Gulf, close to the Strait of Hormuz;
5. to liberate, as he claimed, Khuzistan, as he calls it, Azalistan;
6. Saddam Hussein's other aim was and still is to change the name of the Persian Gulf to the Arab Gulf.

President Saddam's Wishful Thinking and Miscalculation:

Saddam Hussein's strategy was from the beginning based on miscalculation. Some people believe he was misled by others to attack Iran. For months, the Iraqi regime was planning for the invasion. There were contacts and consultations with some Arab leaders. There was a rumour that Dr. Zbigniew Brzezinski in mid-1980 met with Saddam Hussein in Baghdad. Baghdad denied it and Washington remained silent. Although the United States policy, to some extent, seemed to parallel the policy of Saddam rather than Khomeini's, the U.S. pursued a policy of neutrality because of Washington's interest in preservation of territorial integrity of Iran, and fear that war would spread to the rest of the Gulf region and destabilize the area and interrupt oil operations. There was also concern that the USSR would intervene directly if Iran disintegrated. Also, the U.S. government had concern over safety of the Americans who were taken hostage in Iran.

Before the invasion of Iran there were high level meetings between Iraqi and Gulf states leaders and Iraq-Saudi relations improved remarkably. Some Iranian military officers gave the wrong impression to the Iraqis of Iran's weakness. President Saddam Hussein believed Khomeini regime was on the verge of collapse and an attack would bring Iran to her knees and this would introduce Saddam Hussein as the Arab Bismarck and for decades he would fully dominate the Persian Gulf.

Saddam Hussein counted on an uprising in Iran and expected some Iranian military officers abroad could play the role that Lt. Gen. Andrei Vlasov played at the hand of the Germans in 1942. (General Vlasov agreed to head a Russian national committee and to form a corps of captured Soviet troops to fight on the German's side to establish a national government in Russia with help of Hitler's Wehrmacht. but his mission was doomed from the start.) Saddam Hussein failed to comprehend, no matter how much Iranians hated clergy rule, that they could not collaborate with foreign invaders; and their abhorrence of a usurper priest does not necessitate the cooperation with foreigners aiming at destroying an historic cathedral. Iraqis also counted on tribal elements who were fighting against Khomeini. Iranians inside and outside united in defense of the country and condemned the Iraqi invasion unanimously. Even when the army took action in late 1981 and in May 1982 recaptured Khuramshahr, and following the counter offensives of Iran, the opposition to Khomeini were still very careful in their statements not to say anything which might help Iraq and be detrimental to the Persian army which was fighting a national enemy. When Iraq's number two man, Tariq Aziz, met last January with Mujahedin leader Masoud Rajavi in Paris and struck an agreement with him, almost all opposition groups outside condemned Mujahedin leader for identifying himself with the "enemy" for possibly securing tainted money.

President Saddam Hussein did not win the war, did not overthrow Khomeini, did not liberate Khuzistan and did not achieve hegemony in the Persian Gulf, but brought economic devastation for Iraq too and created the good opportunity and high time for Israelis to destroy the 70 MW French-built nuclear reactor east of Baghdad on June 7, 1981, a reactor which was to become operational and "hot" within three months. Saddam not only caused harm and misery to both Iran and Iraq, but contributed to prolongation of the clergy's grip on Iran.

According to Karl von Clausewitz, everything takes on a different shape when we pass from abstraction to reality. President Saddam with wishful thinking and miscalculation created a grave situation which might catapult the area into chaos, and presently has given an excuse to Khomeini to continue his counter-offense and to divert the attention of 5 million unemployed and internal struggle for power among the clergy and harsh repercussion and torture.

Arms Without Security and War Without Victor:

War has brought irreparable damages for the two rivals. Decades of efforts and tens of billions of dollars which were spent for modernization in Iran and Iraq went down the drain. Since 1968, when the British declared that they would withdraw

from the Persian Gulf, the states of the Persian Gulf had until the end of 1982, had spent an estimated (directly and indirectly, visible and invisible) approximately \$700 billion on arms and military goods and services. They spent tremendous amounts of their budget on defense and yet are far from security; the area is less stable than at any other time. All the states are at the mercy of producers for arms and spare parts. Never before in history has such a huge amount of money been spent without achieving at least minimum security. Never before in the world, in a tiny area of 60 million people, has there been the experience of the combination of wealth and weakness and insecurity and vulnerability. They have money but no power. They purchase arms but cannot use modern technology. The situation is that with all the money spent and arms brought for security, no Persian Gulf state leader can have certain knowledge that he may go to bed and get up in the morning and have breakfast with his family.

Until now, several provinces of Iran were destroyed: Kurdistan, Khuzistan and Kermanshahan, including the great Abadan refinery. There are more than 2.5 million war refugees in Iran, between 80 to 100,000 dead, 200,000 wounded, 60,000 taken prisoner by Iraq and missing in action. One report goes higher and puts the number of killed, wounded, taken prisoner and missing in action up to 450,000.

Iraq's toll is estimated at 70,000 dead, 100,000 wounded, 50,000 taken prisoner and missing in action. President Saddam Hussein had said, immediately after the Iraqi invasion, to one Arab leader that Iraq would settle the issue of military supremacy in the Gulf for the next 50 years. From the beginning, performances of the two armies were poor, and according to General Sir John Hackett, the author of "The Third World War", both combatants were fighting with 1970s arms and 1917s tactics. The reason for the Iranians' poor performance was that the Persian Army, due to wholesale execution of officers, simply lost its teeth and was left without command and control. Prior to the war, close to 20,000 were executed or forced out from the three services. Up to now, it has been estimated that 25,000 to 30,000 military were executed, taken to prison or went into hiding and left the country. Presently, there are approximately 7,000 Iranian military officers living abroad, mostly in the United States and western Europe, and the majority of them still are at strategic age.

Nevertheless, the Persian Army managed to fight heroically, and in May 1982 with a major offensive recaptured Khurramshahr and transferred the course of war from defensive to offensive.

Iran and Iraq - Weak and Strong Points:

At the inception of the war neither Iran nor Iraq had good commanders. Julius Caesar believed "neither a good army poorly commanded nor a poor commander with good soldiers is worth much." Iraq, with more modern arms, proved that it was unable to fight. Iraq's decision from the beginning was not based on objective collection and analysis and interpretation of facts. Without planning, capacity and capability, thinking, just buying modern military technology, Saddam Hussein found it fit and decided to play Bismarck to become Lord paramount of the Persian Gulf. This political miscalculation and military incompetence, and madness on the part of the clergies to continue the war for exporting revolution based on human tactics will be a good new subject for the next edition of Norman Dixon's book on "The Psychology of Military Incompetence." From the beginning of the conflict every student of war and politics knew that this war would be dangerous and costly, and difficult for Iraq with 14 million people to continue a campaign with Iran of 40 million population and \$120 billion GNP, with vast territory, more resources and zeal to fight. Iranians deemed it necessary to defend the country against, Iraqi attack no matter who controlled Iran.

Iran is in a better position to continue the war for economic reasons, too. Iran's oil export is 2.5 million barrels per day, while Iraqi production is 650,000. Iraq received \$23 billion from oil in 1979 and her oil revenues last year were close to \$6 billion. Saudi Arabia, Kuwait and the United Arab Emirate, with the drop of the oil price and production, are not in a position to help Iraq effectively. According to David Ottaway's article in the Washington Post, March 16, 1983, Saudi government is facing an unprecedented deficit that analysts estimate could be between \$5 to \$20 billion. Iraq is running into serious difficulty and even with an austerity budget the government will have an \$8 billion deficit this year. Foreign contractors are constantly complaining about Iraq's request for deferred payments amounting to hundreds of millions of dollars. On the military side neither Jordan nor Egypt could help effectively. Presently, a small contingent of Jordanian soldiers and several thousand Egyptian advisers are more symbolic than fighting force.

Iran is in Much Better Position in this Protracted War:

Oil money impacted on Iran, too. Iran is running into serious difficulty because of inflation, unemployment and so on. This possibly is causing prolongation of the war with attendant further damage to the economic and political

frailties of both countries; but Iran is in a much better position to exert with "available means and strength of will to compel her opponent to fulfill her will..." Because:

According to Professor William Beeman of Brown University, as he explained in the New York Times, October 2, 1980, "Iran has Iraq's number", Iran knows Iraq better. 60 percent of the population of Iraq are Shiite and Iranians think of Iraq as an integral part of Iranian cultural sphere. Even Saddam Hussein's name is Shiite and the important shrine and pilgrimage center of Shiite are located in Iraq, and finally, Iranians have their numbers.

Moreover, Iraq, in addition, with Iran to the east, is confronted with Syria to the west and Kurdish problems inside which have been experiencing for decades (40 years), and a Shiite majority (8 million) and even Libya's President Quaddafi is exploiting President Saddam's predicament. He, along with Hafiz Assad of Syria, are helping Khomeini. Thus, for Iran, this is a better position to continue an overt and covert campaign against Iraq.

Dangers of Balkanization of the Area and an Opportunity for the USSR:

Since the Iranian revolution, the Persian Gulf has become very unstable - volatile - and there is no natural balance of power in this area. While the United States and Soviet Union apparently are neutral in the Gulf war and both are watching the situation carefully, revolution in Iran and war between Iran and Iraq is a source of great concern to the Gulf states because of the destabilizing factor which finally might replace moderate regimes of the area with radical ones, and the radicals with Marxists.

The war will contribute to rapid change and maybe disintegration of both of the combatants unless a negotiation is started and peace concluded. Otherwise, it will spread to other Gulf states and its impact will be seen in northern tier states, too. It will contaminate 10 million Kurds in Turkey, and Baluchis in Pakistan. Civil disturbances and instability in the Persian Gulf will create opportunity for the Soviet Union to advance its influence deep into the Gulf.

It is clear that the USSR is prepared to move cautiously so as not to incite in the West a response; but it should be noted that the USSR can legally intervene physically and militarily because of current threats to that country's stability and, therefore, to Soviet southern borders posed by the Iran-Iraq war. The Soviet Iranian Treaty of 1921 (articles 5 and 6) specifically allows Soviet intervention under such

conditions, and although Islamic government abrogated and disavowed that treaty along with the executive agreement of March 1959 with the United States on security and defense, the USSR continued to maintain legitimacy and effectiveness of the 1921 treaty. The problem is that President Carter, during the negotiation and agreement to free the hostages, put the U.S. in a position which weakened its hand in the event of a possible Soviet intervention and this was a geopolitical victory for Russia. If there is no wall of resolve in the west, and specifically in the United States, the Soviets may repeat what they did in Afghanistan, even by invitation of some elements within the government of Iran. In this case, if history is a guide, the Soviets will follow Lenin's law, "Probe with bayonets, if you encounter steel, withdraw; if you encounter mush continue," and until now they gradually and steadily marched toward the warm waters of the Indian Ocean and if they do not encounter steel, they will continue. The Soviets can also play many cards: the Suedetanland card, in Azarbaijan; the Kurdish card for independent Kurdistan and the Baluchi card for establishment of naval base in Chah Bahar. It is not only oil which makes the Strait of Hormuz and Iran the pivotal strategic location in the Eurasian rimland, but Iran is a land bridge and the golden gate of the Soviets to the Middle East, the Persian Gulf, South Asia and Africa.

The USSR, with the subjugation of Afghanistan, now has close to 1,800 miles of border with Iran, second after the People's Republic of China which has 4,000 miles of border with the USSR. The USSR is 300 miles from the Baluchi (Iran and Pakistan) coastline on the Indian Ocean and it is surprising that the West does not feel alarmed. They are longing to control this area. If they reach their dream of controlling a major sea and air base Chah Bahar, with their present major air and naval base at Cam Ranh Bay, they could strike a geopolitical revolution which will disturb the world balance of power and pose a potential threat to U.S. strategic position in the Pacific and Indian Oceans.

If the Soviets, as Senator Kennedy in his article on "The Persian Gulf" in the New York Times, September 15, 1982, explains, through political means achieved domination of Iran instead of using military might, no rapid deployment force, no bases for U.S. troops, no aircraft carriers, no military alliance with other countries in the area could undo the damage. In fact, Kennedy believes, Soviet control of Iran would be the most strategic defeat for the West since World War II. In the last four years, three important developments have changed the balance of power in the Persian Gulf: the revolution in Iran and destruction of the 500,000-man Persian army, along with civil and intelligence institutions; the Soviet invasion of Afghanistan and the sitting of the Soviet

Army 300 miles to the Strait of Hormuz; and the Iran-Iraq war, which is the most dangerous of all.

Iran's fourth successive offensives met with failure in early February. The clerical regime in Tehran began its fifth attack south of the battlefield with Iraq, and since the offensive started at the strongest point of Iraqi front, it did not succeed. The new outbreak of fighting is bad news for the Arab states of the Persian Gulf that are hoping the fighting can be stopped at least enough to bring a giant oil slick in the Gulf under control. Thousands of gallons of oil are leaking out of damaged Iranian oil wells daily. The Iraqis, since May 1982, have fought reasonably well because they are fighting on their own soil. Although there are reports of defect of young conscripts, tank and air crews, the clergy encourages young boys, under age, to sign up with the Revolutionary Guard. But strategic advantages lie with Iran. War between Iran and Iraq has become a Khomeini-Saddam war. I believe it will continue unless one of the two disappear from the political scene. It is possible that Iraq will be defeated. If so, the wave of fundamentalism will overtake the Gulf states and after the demise of the Ayatollah Khomeini, Iran itself may enter into chaos and civil war. Or there could be a radical Iran-Iraq pact backed by the Soviet Union or the axis of Tehran, Damascus and Baghdad, also threatening the state of Israel. The struggle for power between different factions of clergymen and in the Revolutionary Guard itself, could drag Iran into civil strife. Although the Tudeh Party is banned again and its leaders have been arrested, the Soviets have different assets in Iran to rely on.

Presently the clergy has based its rule in Iran on three questionable pillars: the personality of Ayatollah Khomeini; the Mosque; and the Revolutionary Guard. Khomeini's race is ruin, he is 84, not well and suffering from cardiovascular problems. There are rivalries among the guards' leaders and three important factions, each supported by rival clergy groups have been identified. The Mosque has lost its appeal. With Khomeini and the clergy's suspending the bill of fundamental right of Iranians and abolishing the right of habeas corpus, people do not trust the religious leaders. The majority of people do not attend the mosque and prayer ceremonies and resent its guardians (clergy) who brutalized Islam's political culture and gained control over Iran, by the name of God, while God was off duty. Anyhow, the current slump in oil price coupled with the world over-supply will cause prolongation of the war. It may, for example, slow down Iran's arms buying on the international market forcing compromise on its antagonisms toward the USSR in order to get additional Soviet weapons and supplies. It will have the same effect on Iraq, where the trend has already stabilized. (Witness recent major supplies of new

Soviet equipment to Iraq.) As far as Iran is concerned this weakens Khomeini's position and strengthens the various Soviet and pro-Soviet elements in the country who have been active covertly.

As long as the combatants have the will to fight, the arms will be available. For the Khomeini regime, the war is the only way in which they could keep the army and militia and the people of Iran away from the center of political intrigues in Tehran. They do not like the army and militia to participate in the power struggle. Once the war is over, the people will question the regime's harsh repression. In many policies, for crime and torture, for infringement of the rights of women, for the four-year "great leap backward" programs, and so on. Moreover, the regime is afraid of facing the task of reconstruction of war-damaged areas and rebuilding the economy because the clergy is the destructor, not the builder.

No Alternative to Peace:

The people of Iran desire peace with respect for their rights and the preservation of national sovereignty and territorial integrity of Iran. I am sure that the people of Iraq also want peace. The public in Iran and Iraq resent the confrontation and devastation of endless war. It has been said that war is easy to start, expensive to continue and difficult to stop, but this war must be ended because it has devastated the economy of Iran and Iraq and drained the treasuries of both countries. It will end in the disintegration of both countries. To end the war, it needs wisdom, good faith, magnanimity and realistic approach of affairs. If Khomeini was sincere when Iraq declared a ceasefire and was ready to meet Iranian losses and respect political and territorial integrity of Iran, he would prepare for serious negotiation with a strong position to make peace with Iraq. But he has chosen to follow the war course as Hashemi Rafsanjani, speaker of The House, said on February 8, (1983), the Khomeini regime is not interested in peace and reparation by Iraq. She wants Khomeini's style of Islamic government to be established in Baghdad. In this respect, if Saddam Hussein miscalculated in invading Iran, the clergy regime's insistence on war, instead of negotiation for peace, and sending young and under-age into the jaws of death would be a good case to study on madness. The people of the two countries are now paying heavily for the stupidity of the rulers. The people of Iran and Iraq under two totalitarian regimes have no vote, no voice, no freedom and no choice. This situation should not be tolerated and it is the time for the public in the two countries to find a way out of this predicament.

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THE IRAN-IRAQ WAR

By

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As a government servant, I am completely neutral and impartial. I have no favorites in this war. Also, I should not claim to be an historian and will not attempt to be one here today. Rather, I will attempt to convey general impressions and perceptions. Speculations on the "What Ifs" such as what if the Shah had not fallen when the war broke; what if Khomeini had not destroyed the officer corps and so on are of little value for those of us who work with the issues and realities on a day-to-day basis.

Since I believe that most of you are interested in the struggle itself rather than the political, religious, or economic issues which are woven into the conflict as well, I will concentrate on the military party.

General Military Comments:

This is a war of mutual inefficiency -- they are no Heinz Guderians, George Pattons, Moshe Dayans or other military masters here. Indeed this war has some of the mental sterility reminiscent of the western military mind in the trenches in 1916.

Why is this? I would postulate that the Arab and Persian armies are both using weapons which they don't understand and tactics which they have borrowed from others. Not understanding the weapons means not understanding how to exploit their capabilities and how to use them to win the war. However, it is the tactics and strategies which leaves more unanswered questions.

If either side had formulated a coherent strategy backed up by tactics suited to the terrain, and capabilities of their military establishment, coupled with a realistic assessment of the enemy, success would have been far more likely.

Instead of using tactics best suited to a desert people and equipping itself for short, raid-type war, Iraq chose to equip itself with vast amounts of Soviet hardware and attempted to emulate the ponderous, methodical advances developed by the Soviets in World War II.

I would argue that the Arab states in general are culturally ill at ease using such tactics -- a fact borne out by the collapse of Iraq's offensive after several weeks of "easygoing", and still short of any major objective such as Dezful or the province of Khuzestan. The street fighting in Khorramshahr seems to have been key in this regard. The raiding tactics of Beduin warriors was forgotten and faith was placed in a large order of battle and the tactics of another nation and people--a receipt for disaster.

It is also obvious that the Iraqis did not do their homework in assessing the degree of support which they would receive from ethnic Arabs in Khuzestan; nor did they gauge the "rot" in Iran's military correctly and the zeal of Shia fighters probably never entered their military calculations.

Starting with ill-defined objectives, using ill-suited tactics, the armor-heavy, support-weak Iraqi army was soon halted. The attrition warfare which followed for about a year gave Iran a model training ground, plus the time to rebuild and go on the offensive in September 1981 at Abadan and inflict the first of several defeats on the Iraqi army.

What about Iran? With its well equipped professional military in a shambles it appeared invitingly weak. However, Iran was prepared to sacrifice enough men in places like Khorramshahr to stop the attackers and they did so with a level of fanaticism which shocked the Iraqis. I personally doubt that Iran could have stopped an armored assault by 2-3,000 Iraqi tanks, regardless of the objective. But this did not happen.

Iran then capitalized on the religious zeal of the revolutionary guards to stop the Iraqis. Having gone on the offensive, Iran reverted to the tactics of frustration [human wave assaults] and proved remarkably inept at exploiting advantages gained at great costs. Iran's leadership was clearly distrustful of the former Shah's military men and had none of its own. Direction in the war became ad hoc and attritional at best--designed to grab back territory a piece at a time and inflict losses on the Iraqis. The ability to launch coordinated offensives, with limited resources, maintain the ability to exploit breakthroughs, and assemble a coordinated strategic plan for executing the war has been lacking.

Iran has attempted to replace strategy and tactics with religious zeal and has used a lot of infantry to clear minefields. The use of fanatic Shia militia was effective to a certain degree when the terrain favored Iran [rocky, mountainous areas that limited mobility]. Iraqi troops, on the defensive, had low morale and were in Iranian territory.

However, once these areas were retaken the border has generally reestablished and the terrain situation changed. The territory just inside Iraq and behind the border is generally flat and open, offering little cover and concealment for infantry--and much more ideal for armored forces. Hence one can say with a degree of accuracy that Iran has not changed its methods when the enemy and terrain both changed, and this lack of adaptability will probably manifest itself in failures such as the assault against Al-Basra and the recent offensive that was defeated west of Dezful.

Specifics

I feel it may be useful to discuss the general performances of the armies and air forces involved and perhaps gain some insights.

THE AIR FORCES

Iran:

by the time Iraq attacked, the rot of the post-Shah era had set in. Maintenance was weak and getting worse, purges were common, defections rather high and morale rock bottom. Of over 80 F-14s probably a quarter were operational. Higher levels of the 188 F-4s and 160 F-5s were operational, but it was no longer the air force of the Shah. When the war came, this air force was never used in the purely military sense, but it did bomb some economic targets and had the potential to threaten weaker Gulf states. The Iranian Air Force never conducted any close air support missions, or major attacks designed to support offensive ground operations by isolating the battlefield. Indeed the Iranian Air Force did not even succeed in securing Iran's airspace. In short, the IAF has been a big, expensive failure.

Iraq:

Slightly outnumbered by Iran's air force at the start of the war the Iraqis could claim over 115 MiG-21s, about 80 MiG-23s, some 100 Sukhois and a dozen or so TU-22s. France has reportedly delivered Mirage F-1s in the past year. Iraq had a higher operational rate. Iraq initially used its air force only to protect its own airspace. Only in the last year has it ventured forth to the battlefield and even then its effect has been marginal. Iraq has the potential to devastate Iranian targets--military, economic, and political, yet the lack of aggressive pursuit remains a question.

There have been some reports of air battles, but basically these are exaggerated or can be discounted. In short, neither air force has had a significant impact on the outcome of the war so far.

NEW EXPLOSIVES MANUFACTURING
TECHNOLOGY FOR MILITARY APPLICATIONS

By

Gary M. Thornley, Ph.D.

Background

The annual consumption of industrial explosives in the United States in 1981 was about 4.3 billion pounds (2.0 billion kilograms). The total world-wide production is not known with any certainty, but is estimated at 9.5 billion pounds (4.3 billion kilograms). The annual quantity of explosive materials used in military applications varies considerably from year to year depending upon the relative state of peace throughout the globe, and is estimated to be approximately 15 to 20 percent of the industrial quantity.

Initially many of the same explosive products, such as black powder and TNT, were used in both military and industrial applications. Gradually, however, major differences developed as industrial manufacturers were forced by economics to design products more compatible with commercial needs. Most military applications require that explosives have long term stability and require rigid adherence to specified performance characteristics. This is necessary where components containing explosives are required to be ready for immediate use after years of storage and the performance of these components may be critically affected by slight changes in the characteristics of the explosive material. Since lives and expensive equipment may be at stake, these performance standards have taken precedence over cost.

As these two broad lines of products have tended to develop independently, product technology transfer has been quite limited, and then primarily from the military to the industrial. Examples of this are the use of military surplus TNT and smokeless powder in some of the early explosive slurries used by industry and the current use of several molecular explosives in boosters (primers) for initiating relatively insensitive products. Technology on the industrial side, however, has improved considerably over the last decade or two, probably at a faster rate than produced by the more conservative approach taken by the military. Some of this industrial technology, in terms of formulations and materials handling and manufacturing processes, has progressed to the point where it may be applied advantageously to several current and planned military applications. Among the potential advantages offered are better economics, a greater degree of safety, easier logistics, and more versatility in product and process optimization.

Generally the types of explosive products used by the military have been of the molecular explosive type such as TNT and RDX (Cyclonite). These products have the two key components of an explosive, the fuel and oxidizer, as part of the same molecule. This most intimate contact allows the fuel and oxidizer portions of the molecule to react very rapidly upon detonation to produce large volumes of gases. (CO₂, H₂O, N₂, etc.) with the evolution of large quantities of heat. Although such products tend to have very reliable physical and chemical properties, they are also fixed in terms of these properties as well as their energy, safety, oxygen balance, and sensitivity characteristics.

Most industrial explosives, on-the-other-hand, can be characterized as composite explosives. Typical of these is the slurry type where two main components, an "oxidizer solution" and "fuels," are mixed together in a specific ratio to form a detonable product. The intimacy of contact between the oxidizers and fuels is sufficient to allow a detonation reaction to proceed, producing similarly large amounts of gasses (CO₂, H₂O, N₂, etc.) and heat.

A wide variety of specific oxidizers and fuels are suitable for use in composite explosives of this type, depending upon the properties desired. Oxidizers typically are aqueous solutions containing inorganic nitrates or perchlorates, such as the ammonium or sodium salts, plus certain trace ingredients. The fuel components typically are hydrocarbons such as coal dust, natural asphalt (gilsonite), wax, and oils. Sulfur is also a common ingredient as in granular aluminum, plus thickeners and trace ingredients which may be present in sufficient quantity to contribute in the reaction as a fuel. Fuels may be either liquids or solids. Solid oxidizers may also be used. Ingredients can therefore be selected to vary the energy, sensitivity, oxygen balance, rheology, and stability of the final product as desired. This versatility makes it possible to adjust the fume and detonation, as well as physical properties of explosive slurries to meet specific requirements of varying applications. It should also be noted that it is possible to achieve these results from ingredients which by themselves, are all essentially nonexplosive. In addition they are commodity items that have relatively stable supply and price parameters and are widely available.

These characteristics, therefore, offer some important economic and safety improvements over typical military explosives, not only in the finished products, but also in the transportation and availability of ingredients, and in the physical plant and manufacturing processes required.

IRECO Explosives Technology comprises both explosive formulations and the required manufacturing equipment and techniques. As previously indicated the ingredients are typically nonexplosive, thus reducing the need for storage magazines at the manufacturing site, simplifying the logistics and reducing hazard exposure to the public, as well as the work force. In fact most typical manufacturing conditions are such that no explosives are present until the product is loaded into the final container, whether it be the bare borehole at a mine or some other container such as a cartridge, or other ordnance item.

The IRECO manufacturing system is composed of two sets of equipment with separate functions:

Support Facility

This facility pre-blends the various ingredients into the two major components of a binary slurry explosives system; "oxidizer solution" and the "fuel" component. The oxidizer solution is typically an aqueous solution of inorganic nitrates or perchlorates and the fuels are either a mixture of aluminum powder and solid hydrocarbons and thickener, or blends of liquid hydrocarbons. This requires heated blending tanks with stirring equipment and transfer pumps for the oxidizer solution as well as augers or forklifts for independently handling the oxidizer and fuel components.

Much of the product quality control as well as the ingredient quality control is accomplished during this initial preblending stage. This equipment has been modularized to simplify erection, reduce costs, and accelerate installation and setup times in the competitive industrial environment.

Blending Equipment

The nonexplosive "binary" ingredients, plus trace ingredients and possibly a third major component (such as additional prilled ammonium nitrate), are finally blended together into the final product by the mixing equipment. The finished product is then loaded, usually by pump, into the cartridge or other containers where the thickening process (hardening and/or crosslinking) is completed.

Mobile pump trucks with nominal 12 ton capacity are loaded with the binary components at the support facility and then transport the materials to those locations in the field where the final blending operation takes place as the explosive is pumped into ordnance devices or pre-emplaced

containers to construct barriers or trenches on roadways or in open country for the purpose of impeding vehicular traffic as might be required in a combat environment.

This two-stage method of manufacture is adaptable to several different energy grades of explosives as well as several different formulation families. This system can materially reduce finished product explosive inventory. The high availability of the required ingredients may also reduce nonexplosive ingredient inventory. In many applications it is feasible to design the sensitivity level of the final explosive product such that all dimensions in the manufacturing, blending and pumping of the product are subcritical for the particular explosive until it is loaded into the final container. This greatly improves the safety of the process involved.

Production Capabilities

IRECO explosives and the associated manufacturing facilities are in wide use at ferrous and non-ferrous mines, coal mines, both in open pit and underground applications, and at locations which encompass nearly all climatic and geographical conditions including arctic temperatures, arid deserts, and humid jungles. Of the approximately 275 million kilograms of slurry type industrial explosives manufactured in North America approximately 45 percent is manufactured by IRECO at its plants or by other manufacturer under license to IRECO. IRECO has thirty plant sites and seventy pump trucks in operation in North America exclusive of Canadian licenses.

IRECO operates three production sites including ten pump trucks in international operations located in Chile and New Guinea, which collectively produce 25 million kilograms of industrial explosives annually.

In addition IRECO licenses explosives technology to end-user customers (such as mines) as well as major explosives manufacturers in the following foreign countries:

Australia	Japan
Austria	Namibia
Belgium	New Zealand
Canada	Norway
Finland	Philippines
France	Singapore
West Germany	South Africa
Hong Kong	Sweden
India	Switzerland
Italy	United Kingdom
	Yugoslavia

These license arrangements are so extensive that approximately 50% of the slurry type industrial explosives made outside the United States is made under license from IRECO.

Military and Related Experience

IRECO has been active in adapting industrial explosives for use in munitions, crater or barrier generation, nuclear blast effect simulation, and civil work projects based on cratering techniques. This had lead to the use of IRECO products in some unique applications as well as more conventional munition loadings.

IRECO provided the explosive and loaded the submersible container for the large (250 tons of DBA-65T2 type slurry) nuclear effects simulation device which was detonated at a depth of five thousand feet in the North Pacific Ocean. This project was accomplished by IITRI on an ARPA grant, the purpose of which was to study the feasibility of detecting nuclear testing in the eastern hemisphere by monitoring seismic disturbances.

Cratering as applied to civil works projects has been successfully accomplished with DBA-22M, an IRECO developed slurry explosive. Chief among these are the "Pre-Gondola" channel-to-reservoir connection blasts at Ft. Peck, Montana, and the "RR-3" railroad cut of the "Trinidad Dam Project" in Los Animas County, Colorado. The former demonstrated the ability to connect a previously excavated water conveyance channel with a large open body of water by means of a row cratering technique using large buried slurry point-charges. "RR-3" involved the creation of a railroad cut through a side hill location by means of explosive cratering excavation. Both blasts were landmark demonstrations in the successful application of commercial explosives to explosive cratering techniques. These and similar projects were accomplished by the Nuclear Cratering Group (NCG) and later the Explosives Excavation Research Laboratory (EERL) of the U.S. Army Engineer Waterways Experiment Station, U.S. Corps of Engineers.

IRECO has also provided the explosives for use in nuclear blast effect simulation tests as well as cratering performance and more theoretical cratering excavation parameter development studies.

A storable binary system has been developed which is easily field-mixed and pump-loaded and which may be used to generate obstacles or trench barriers against vehicles. This system has been demonstrated in the United States, Western Europe, and Korea and takes advantage of the extremely high blast and cratering potential of these industrial based explosives.

The use of DBA-22M, an IRECO developed military explosive based on industrial explosives technology, in nuclear blast simulation devices eventually lead to its use as the explosives fill in the BLU-82/B blast munition.

Large M-121 bomb casings cast with tritonal had been adapted for use as helicopter landing zone clearing devices (HLZCD). When a shortage of the cases occurred the BLU-82/B blast munition was developed as a replacement. It was a 15,000 pound, parachute stabilized helicopter landing zone clearing device loaded with DBA-22M slurry explosive.

More conventional munitions such as M-117 and MK-82 bombs have been loaded with IRECO developed explosive fills and have been flown and drop tested.

IRECO has demonstrated a history of adapting industrial based explosives to cratering applications and blast type munitions and is currently developing explosives products as fills for mortar and artillery projectiles. The combining of new military oriented explosives formulations based on the latest industrial explosives technology along with IRECO's proven system of industrial explosives manufacturing and support should provide ordnance loading systems with capabilities of unprecedented versatility, low cost, safety and simplicity.

Military Explosive Manufacturing Plant Characteristics

The manufacturing and processing equipment developed by IRECO for industrial explosives can be used with similar advantages for the production of military formulations. Among the advantages of these products and this manufacturing system are found the following:

- . No highly trained technicians required
- . Easily adaptable for filling bombs, mines and shells
- . Rapid and simple filling operations
- . Easy filling of pre-emplaced anti-tank and cratering devices using mobile unit
- . High volume production capability
- . Mobility if desired
- . Non-toxic products and ingredients
- . Safety in manufacturing, handling and storing

- . Reduced explosive storage requirements
- . Greatly reduced costs for ingredients
- . Greatly reduced capital costs for the physical plant
- . Labor non-intensive operation
- . Production volume easily adjusted to production needs
- . Same plant can be used for production of industrial explosives for mining, quarrying, construction, etc.

Properties of Military Products

The explosive energy of these products which have been developed for military use may range from 650 to over 2,000 kcal/kg and densities may range from 0.75 to 1.90 kg/l. This compares with a density of about 1.60 to 1.70 kg/l for both TNT and Composition B (military type products) and energies of 1,300 and 1,400 kcal/kg respectively.

Costs may range from ten cents per pound to a dollar per pound for ingredients and 10 to 50 cents per pound for manufacturing costs.

Thus it is seen that modern and innovative explosive technology developed over a period of many years can now be applied to the production of military explosives with great advantages in safety, versatility and cost.

ASPECTS AND TRENDS OF INTERNATIONAL OFFSET/ COPRODUCTION AEROSPACE PROJECTS

By

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I will attempt to present a few thoughts underlying the vast subject of international collaboration through offset arrangements. Issues related to technology transfer will be outlined, something that is becoming increasingly important to Government and Business.

This presentation is structured in three parts.

The first part will deal with the general aspects of technology transfer. The second part will concentrate on multinational coproduction programs around the world. It will make various observations on setting up coproduction multinational collaborations and it will present certain implications on cost, schedule and overall development. The last part of the presentation will try to forecast offset and coproduction activities in certain developing areas in the coming decade.

Since the end of the Second World War, aviation/aerospace technological knowledge has played a more important role in industry everywhere in the world than ever before. Moreover, the need to develop new technology at an ever accelerating pace has led to a rapidly growing international exchange of technical knowledge. The exchange of new technical information may help to avoid duplication; alleviate the tremendous costs that can no longer be borne by the industry of one country; and assist developing countries to participate in every facet of the modern industrial world.

With the rapid world-wide advances in technology, countries are becoming more and more dependent on each other for raw materials, markets and technological improvements. If owners of technology and those who wish to acquire it are to operate effectively in the increasingly important international markets, they must have knowledge of business practices and laws of the major world trading areas, which include both developed and developing countries.

Aviation industry advances to a notable degree through the transfer of technology from one company to another and from one

A LOOK AT THE FUTURE OF THE MBT

By

Brigadier General Philip L. Bolte, U.S. Army (Ret.)

During World War II, the appearance of the panzerfaust and the bazooka led to the belief on the part of many that the days of the tank were numbered; these rocket launchers put in the hands of the infantryman an effective means for destroying one of his major threats. It turned out that there was a major drawback to these short range rocket launchers: it took a brave man to wait until the tank was close enough to hit. Generally, there were more tanks than there were brave men in any particular area of the battlefield.

We saw a similar situation in the October 1973 Middle East War, when initial reports indicated that the Sagger missiles of the Egyptian Army had brought disaster on the Israeli tank forces. In that case, it turned out that the assessment was only valid during the initial stage of the Sinai battle, where Israeli tanks were thrown alone against the missiles of the Egyptians. The Israelis soon learned that the proper application of the combined arms concept was effective against a missile-equipped force. In fact, tank tactics at the small unit level were developed that did much toward countering the missile threat.

All of which goes to show that there are no ultimate weapons, offensive or defensive.

On the other hand, there is a time when particular weapon systems outlive their effectiveness on the battlefield. Perhaps there is a parallel between the obsolescence of the armored knight resulting from the introduction of effective antiarmor arrows and launching mechanisms and the possible obsolescence of the tank resulting from the introduction of effective antitank munitions.

It is critical that the tank developing nations realize it is the career of tanks has peaked, so to speak. The development cycle of tanks is such that the current fielding of new tanks by these nations dictates an increasing level of effort in the coming years to the development of the next generation tank, if there is to be one.

For the other nations of the world, the question of tank viability is important in order that they properly apply their financial assets to the building and maintenance of effective land force structures.

The primary problem faced by the tank today is one of survivability. It is a problem that has been faced by the infantryman for many years. Nothing is more vulnerable than the rifleman, and yet he still exists in every army. The reason: he does a job which no one else can do. There is a parallel with tanks. The tank brings to the battlefield a degree of mobile, protected firepower that allows the pursuit of its unit's aims in an aggressive and dominating manner. That role must be performed and until some new and unique means of performing it is discovered, a tank, or something very much like it, must be there.

What we must determine is how we can assure sufficient survivability of the tank to allow it to accomplish its mission. Survivability is the key to the future tank. It is not its firepower or its mobility that is in question today; it is the ability to survive.

There are multiple threats to the tank on the modern battlefield. Tank guns themselves have increased in their antiarmor effectiveness; antitank guided missiles are becoming more effective as generation succeeds generation; precision guided munitions, such as Copperhead, hold a major threat for the tank; top attack munitions from a variety of sources threaten a most vulnerable aspect of the tank; mines are becoming an ever-increasing threat. Meanwhile, launch platforms themselves are being proliferated in a variety of forms: light vehicles with missile or cannon armament; helicopters with sophisticated missile systems; high performance aircraft with a variety of munitions; artillery with precision guided munitions and scatterable mines. The tank is their target.

The measures to achieve survivability that can be taken in the design of tanks must become more than simply adding more armor protection. We need to take a new look at achieving survivability, one that puts armor protection in proper perspective as a part of an overall effort at surviving.

Now there is nothing new or earthshaking here; what must be new is the emphasis we put on each of these contributors toward survivability. The emphasis must shift from absorbing hits to not being hit.

There are a number of steps which can be taken to avoid being seen that include varying degrees of sophistication. A reduction in size would certainly help; mounting the weapon high on the vehicle so that the exposed area is less when in a hull down position would be effective. Needless to say, these two possibilities would also help in hit avoidance.

As electronic means of detection become more prevalent, means to counter them must be incorporated in tank design. Simply eliminating sharp corners in the external configuration can assist in electronic detection avoidance, as can use of a proper external finish. The reduction of active electronic signatures in one's own tank can help, as well.

As mentioned, size and configuration can contribute toward hit avoidance. There are also possibilities for more active countermeasures against incoming missiles. Perhaps a form of chaff such as used by aircraft can be used; other means of confusing or damaging the guidance systems of incoming missiles must be investigated.

We already know that agility has a payoff in hit avoidance, although tests to date have experienced difficulty in quantifying that benefit. The U.S. Army's high mobility/agility, or HIMAG, test included gross horsepower-to-ton ratios as high as 86:1. The tests did conclude that military drivers can capitalize on increased agility from gross horsepower-to-ton ratios as high as 40:1 to decrease exposure time.

In the area of absorbing hits, it is obvious that a new tack must be taken... Vehicle weights such as those of Abrams, Leopard 2, Merkava, and Challenger, all in the 55-60 metric ton range, are reaching practical limits. I have already discussed hit avoidance and countermeasures; let me turn to volume and protected area reduction.

The conventional tank is constructed inefficiently with regard to both volume and exposed area, with both a large hull and a large turret. Shown on illustration No. 3 are the kinds of things which can be done to reduce turret size. Reductions of this type can ultimately result in significantly better protection for the smaller critical volume.

Obviously, there is considerable survivability payoff in mounting the gun externally and placing the crew in the hull. A major part of the challenge in doing so is to satisfy user requirements in three areas. First, an automatic loader is required. With an externally mounted weapon, though, there is no practical means of providing for the crew to respond quickly to loader failure. Thus, the development community will have to demonstrate to the user that a sufficiently reliable automatic loader can be developed. Secondly, the elimination of the human loader will result in a crew reduction. The user must be convinced that he can operate a tank within a unit with a smaller crew, considering all of the associated requirements of maintenance, command and control, resupply, and rest. Thirdly, removal of the commander and gunner from the turret to the hull require the use of electronic remote viewing with little prospect of an effective backup optical system.

I cannot overemphasize the importance of gaining user acceptance of these significant changes in tank design. The user generally tends to be more conservative than the developer. Having had a foot in both camps, I believe that the fact that the user realizes that he bets his life on the quality of his equipment tends to influence his thinking. Having an automatic loader fail in the middle of a firefight with no means to correct the problem could ruin your whole day.

Giving up a man in the crew may seem relatively minor to the engineer who substitutes a machine to perform the crewman's duties in the tank, but the tanker who must operate the tank over a long period of time in an operational environment views the situation from a different perspective.

Remote viewing may be highly effective when it is working, but putting the tank commander in a situation that does not allow him to fall back on eyeballs, binoculars, or an optical secondary sighting system may call for more faith in electromechanical systems than his experience warrants.

Investigating these concerns is part of a U.S. Army program. The program includes a tank test bed using an M1 chassis and an externally mounted 120mm gun. In addition, the program also includes a surrogate research vehicle to assist in investigating the various factors involved. This is a relatively near term program, which could result in fielding an improved tank based on M1 major components in the early 1990s.

I cannot leave the subject of survivability without a few words on armor protection: surviving if hit. For many years, all that could be done was to make armor thicker to achieve protection; and that was adequate. The shaped charge swung the pendulum in favor of the attacking system against solid steel armor. Then Chobham and special armor arrived on the scene to provide, for the first time, a capability for preventing armor defeat by shaped charges. The armor developer today is faced with the threat of both large shaped charges from antitank guided missile systems and of highly efficient kinetic energy penetrators from tank guns. Much has been done in the realm of armor development in these areas and more, no doubt, can be accomplished. It will remain true, though, that the less volume that must be protected, the higher the level of protection can be.

I have only talked in terms of increasing survivability, to include a little about what the U.S. Army is doing about it. However, while I said that improving survivability is the primary challenge, we cannot afford to be complacent about the other aspects of the tank. Adequacy today does not mean effectiveness tomorrow. So let me turn to some of the other

areas of tank development in which effort is being applied to ensure the viability of tanks on the battlefield of tomorrow.

Main armament. It is obvious that, no matter what effort is expended on new tanks, the fleet will contain many of the current tanks for a number of years. All of these tanks mount the 105mm gun or, in the case of the M1E1, the German developed 120mm smoothbore gun. Thus, it is appropriate that considerable effort be expended on realizing the full potential of these weapons. The long rod penetrator brought a tremendous improvement in armor penetration. That road is being followed further, as metallurgy and design engineering provide the capability of increasing the critical length-to-diameter ratio of subprojectiles, while still providing accurate flight and preventing subprojectile breakup. Expected improvements in sabot design will continue to improve ammunition efficiency. Thus, we can expect to see improved projectiles for both the 105 and 120mm guns.

There are other areas for improvement to these weapon systems, including the development of new propellants and modifications to the guns themselves. In the area of propellants, changing the burning curves to provide greater energy to the projectile without raising peak pressures would enhance performance by increasing muzzle velocities. Modification to the guns such as lengthening the barrel, making the barrels from better steel, and rechambering all offer the opportunity to increase terminal effectiveness of the ammunition by increasing muzzle velocity.

What about armament for a next generation tank? There are a number of possible paths, and all are being investigated. If one is to believe that the current trend is valid, then we are headed toward a larger caliber gun, perhaps one as large as 145mm. While such an approach may be valid, contemplating the size of the associated tank does not warm the cockles of my heart. Somehow, if the object of the gun is to launch a penetrator of relatively small diameter, there should be a smarter way of doing it better than simply increasing bore size.

Investigations are being conducted in the use of smaller cannons, although these efforts have been primarily aimed at solving the problem of mounting effective guns on light vehicles. Perhaps the best known of these is the 75mm automatic cannon. What should be kept in mind with regard to such weapons is that they may permit a reduction in overall size and weight of the next main battle tank. There is nothing that dictates that an MBT be large and heavy; what is important is that it be a survivable system capable of delivering mobile, effective firepower on the battlefield. In considering smaller automatic cannons as tank main armament, multiple round hit and

kill probabilities provide an alternative approach to striving for high single shot hit and kill probabilities. Even so, of course, there must be a reasonable chance of achieving penetration with a single shot. This fact may preclude the use of smaller weapons as tank killers.

Meanwhile, there are other ongoing developments in the realm of tank main armament. Terminally guided projectiles and liquid propellants offer promise in the not-too-distant future.

In the past, it was necessary to make a choice between a high velocity cannon capable of delivering a kinetic energy penetrator and a guided missile system requiring low velocity to allow time for guidance. This fact resulted in a requirement to use a shaped charge warhead, with effective functioning independent of striking velocity. One promising means for achieving a higher hit probability than currently available at longer ranges with the gun solution is to provide a reasonably well-aimed cannon shot with a guidance nudge in the right direction as it approaches the target. In effect, such a system combines the advantages of the kinetic energy cannon round with the higher long range hit probability associated with guided missile systems.

Liquid propellants for guns have been in development for many years, primarily haunted by metering problems that caused inconsistent firing results. Solutions appear to be near at hand, though. Development of a successful liquid propellant cannon for tank use offers considerable benefits, associated with both effectiveness and survivability.

There may come a time when the main armament of the tank itself is a missile system, or perhaps a new generation of the gun-launcher. The guided missile drawback of an inability to rapidly engage successive targets would be overcome by a fire and forget missile system. There are other disadvantages to missile systems, but probably none that could not be overcome.

In the longer term, there are laser weapons and particle beam weapons to consider; their day may come before the demise of the combat vehicle as a concept.

All of which says that we cannot afford to be complacent about current tank main armament nor can we assume that larger and larger cannons are the solution in the future.

Fire control systems have become a major cost factor in tanks. At this point, in fact, it is cost that becomes the driver in how much capability is included in a fire control system. Given the progress in electronics today, we can anticipate the inclusion of full solutions in future tanks.

The hunger-killer concept, whereby the commander can independently acquire a new target while the gunner engages the last one certainly shows great potential for increasing tank effectiveness.

Currently, the greatest challenge is finding targets, not aiming at them. Given that our potential opponents recognize, too, that survivability depends a great deal on avoiding detection, we can be assured that target acquisition will continue to be the major fire control related problem. Part of the means for solving the target acquisition problem may well be found in the integration of external means of assistance, a more sophisticated system than, "Watch my tracer." Target acquisition would be greatly enhanced by the passage of real time target intelligence to front line tanks.

Several paths are being pursued with regard to tank power trains, including both diesel and gas turbine engines, as well as other possible alternatives. The goal of these problems is to develop power trains of smaller size, greater efficiency, and reduced complexity. These features, particularly smaller size, will contribute themselves to greater survivability.

To cite progress made in this area, the Army has in operation an experimental adiabatic diesel engine that has already demonstrated a 30% improvement in fuel consumption over current highly efficient diesel engines at a thermal efficiency approaching 50%. The development program promises reduction of about 40 per cent in specific weight and volume in relation to the entire propulsion system package. Elimination of the cooling system and possibly the lubrication system, as well, both of which appear possible, would do much to improve engine reliability.

Suspension systems must match the mobility and agility capability that can be provided the tank through high horsepower-to-ton ratios. Improvements on both torsion bar and hydropneumatic types of suspension are being investigated and hold much promise. In the longer term, there may be even better solutions.

I have mentioned electronics several times. There is no doubt that the results of advances in electronics technology will pervade the next generation of tank. In recognition of these facts, the Army coined the term "vetronics" a couple of years ago. Vetronics encompasses the total integration of vehicle electronics, similar to the term "avionics" used in aircraft, but including also the electrical power system.

A major problem in combat vehicle development is the use of earlier developed electronic components and subsystems in a new

vehicle. The result is a hodgepodge of wiring harnesses and force fitting together or mismatched components. The idea of vetronics is to take an efficient approach toward the integration of electronic systems into the vehicle and the vehicle into the electronic battlefield. In this developed program, multiplexing will be used in the control of both power distribution and data transfer. Modern sensor technology will be used to identify threats and locate targets and provide the data to the crew. Opportunities to increase crew capabilities are being explored as a part of the development program. The overall result should be an effective integration of electronic capabilities into the tank.

With regard to what is being done today to prepare for tomorrow, I have talked mostly in terms of hardware programs. There is, in addition, an ongoing Army program aimed at developing the characteristics required at combat vehicles in the longer term. The Army has awarded contracts to four teams to study the next generation of combat vehicles. Here the time frame is out beyond the turn of the century. This program should help focus the efforts of the R&D community on meeting the long term challenges to the tank or its successor vehicle.

The U.S. Army is not conducting its tank development efforts in isolation. There is frequent exchange of information between the U.S., its NATO allies, and others with whom it has data exchange agreements. While the track record of joint development programs leaves much to be desired, it is perhaps in the realm of component development that there is a higher payoff in the longer term of sharing development information and efforts. Certainly the ongoing imaginative combat vehicle development efforts of Sweden are of great interest to any member of the tank R&D community, as will be the British experience with the hydropneumatic suspension on Challenger.

I have hardly scratched the surface on what can be done, what should be done, and what is being done to meet the battlefield challenge to the tank from ever mounting multiple threats. My real aim has been to provide the basis for useful discussion among us during our time together.

THE HELICOPTER-ITS COMBAT VERSATILITY

By

Brigadier-General Samuel Cockerham, USA (ret.)

The helicopter as a tank killer has long been the dream of visionaries in the Army. How close it is coming to being a tank killer may be gleaned from an examination of combat experiences and the basic components in the attack helicopter weapons system.

The essentials of any Army to be successful in battle depends upon its capability to move, shoot, and communicate. No army can hope to be successful without accomplishing these three functions in a superb and unexcelled manner. Any army which has an advantage in one of these areas of combat power enjoys a relative advantage over its adversary. Implicit in this accomplishment is the need for a fighting force whose equipment enables it to operate in all weather conditions, at night with zero degradations from day time performances. If work can be done at night and during conditions of reduced visibility with equal ease of day performance, in effect, the force strength increase by a factor of two-plus times the current force capability.

Exploiting the third dimension of mobility (defined as the distance from GI boot top height to two helicopter main rotor diameters*) is no longer the challenge that it was once thought to be. It is now closer than ever to becoming a reality. With new helicopters on the production line or the final engineering development line, such as, the BLACK HAWK, and the AAH, the US Army has in the offing two of the most versatile machines that it has ever fielded. These two helicopters will make it possible for the commander to move the mass of his firepower with speeds, and consistency impossible in previous conflicts. Notwithstanding, if the tank-threat problem is to be solved, the challenge remains in the area of providing continuous, dependable, day, night, rain, shine, sleet or snow, all weather visibility for positive mobility and combat engagement purposes.

*Commanders have long dreamed of being able to move military units with ease over the battle area unencumbered by conditions or terrain and weather. At the altitude of the G.I. boot top height, the helicopter has the potential capability of providing the commander with that freedom of movement. For it is at this height above the earth's surface that the helicopter retains its maximum protection through the use of terrain cover and concealment - also known as the nap of the earth. From this altitude to two rotor diameters (about 100 feet) above the earth's surface, the helicopter is in the Hover In Ground Effect

Considering that tanks, employed in mass formations, will include air defense with calibers greater than 12.7mm, the helicopter must be capable of operating in this mid-intensity combat environment. To kill tanks the helicopter should be capable of continued flight after being hit by guns in this size range. The AAH and the BLACK HAWK have been designed with this purpose in mind. Both machines will accept hits by a 23mm round anywhere in the area of the upper rotating controls and the main rotor blade systems. In the airframe, the AAH will take hits by 12.7mm rounds and continue flight. This survivability feature of the AAH represents a great improvement over the design features of the UH-1.

A glance at data recorded in Viet Nam during the OPERATION LAM SON 719 reveals the capability of the helicopter to accept hits and to survive in a mid-intensity combat environment involving 12.7mm antiaircraft guns. It should be noted that the UH-1, originally developed in the 1950s was designed only to withstand the stresses and strains of normal aeronautical flight conditions. Survivability, as known today, was not a design parameter; however, the survivability of the UH-1 in a mid-intensity combat environment is most impressive as may be noted by the following data: (Data was collected from actual aircraft log books by maintenance personnel during OPERATION LAM SON 719, February to April 1971).

OPERATION LAM SON 719 (1 February to 12 March 1971)

- . Two combat aviation battalions
- . Authorized helicopters-----247 UH-1s
- . Assigned helicopters-----298
- . Destroyed " "-----33
- . Damaged " "-----100
- . Turned-in " "-----18
- . Total damaged, destroyed, turned-in-----146
- . Total not damaged, destroyed, turned-in----152

*(HIGE) distance above the ground. It receives lift assistance from the rotor downwash striking the earth's surface, thus less power is required. Beyond the altitude of two rotor diameters, the helicopter becomes exposed to SAMs and antiaircraft guns and partially loses the protection offered at lower altitudes by terrain features. Moreover, the helicopter requires greater power when working at this altitude, Hover Out of Ground Effect (HOGE) distance, than it does when it is flying down at the G.I. boot top height above the ground in the HIGE zone.

Criteria	Destroyed	Damaged (Repaired in unit)	Damaged (Turned in to maint.)	Not Damaged
Strike	27	0	0	0
0 Hits	0	0	0	152
1 Hit & repaired	5	70	16	0
2 Hits, repaired	1	17	1	0
3 " , " "	0	4	1	0
4 " , " "	0	3	0	0
5 " , " "	0	1	0	0
Total	33	95	18	152
Percent	11	32	6	51

It is most significant to note that one-half of the aircraft was never hit by guns and of the ones that were hit, one-third was repaired at the unit level of maintenance with organic tools and personnel skills. One of the helicopters was hit and repaired on five separate occasions and was still flying on 12 March 1971, the date of this aircraft damage survey. Approximately 11 percent of the helicopters were destroyed on first encounter with hostile fire. Of this percentage, some of the aircraft could have been repaired and returned to service if they had been recovered; however, due to the aircraft landing in hostile areas behind enemy lines, recovery of the downed aircraft was not possible. The aircraft were destroyed to prevent them from falling into enemy hands. Nonetheless, the OPERATION LAM SON 719 aircraft experience in combat does indicate that the helicopter can operate and survive in a mid-intensity combat environment.

An indication of the helicopter's effectiveness may be obtained from the following information:

HELICOPTERS DESTROYED/DAMAGED---OPERATION LAM SON 719
(35 Combat Days)

Item	Total	Week (Average)	Day (Average)
Helicopters	724		
Sorties	145,342	29,168	4,167
Flight time	57,796	11,559	1,651
Destroyed	60	12	1.7
Damaged (combat)	395	79	11.2
		<u>Flying Hours</u>	<u>Sorties</u>
One helicopter destroyed (combat)		963	2,431
One helicopter damaged (combat)		146	369

As may be observed from the above data, on an average day, 4,167 sorties were flown involving 2,651 hours with 1.7 helicopters

destroyed, some were recovered and components, such as, engines, gearboxes, accessories, and instruments were recycled to maintenance and supply for future issue. The reader is cautioned to note that OPERATION LAM SON 719 does represent a mid-intensity combat environment, and US forces were not permitted to operate on the ground in Laos. Thus, normal fire support from US ground troops, artillery, infantry, armor, etc. was not available. The air mobile operations were supported only by gunships, close air support and RVN troop units on the ground in Laos.

A more recent example of combat experience in Viet Nam involving UH-1 armed helicopters lends an insight into the potential use of armed helicopters with PGMS to kill tanks. Two armed UH-1 helicopters first demonstrated in actual combat that enemy tanks could be killed by TOW missiles launched from helicopters. The two UH-1 equipped with TOW missile launchers and controls arrived in Viet Nam on 24 April 1972. Later, on the morning of 26 May the two helicopters took off from Pleiku to attack enemy units assaulting the city of Kontum. By noon of that day, nine enemy tanks had been destroyed. By the end of the month, the two helicopters recorded 47 confirmed kills, including 24 enemy tanks---a record unique in the annals of warfare. This event confirmed the saying that, "if you can see it you can kill it".

The AAH airframe is a vast improvement over the UH-1, and thus, it is far superior in all areas of performance. As an example the AAH is designed to operate worldwide with out degradation of performance. This is something that the UH-1 could not do in Viet Nam. On hot days, and at high elevations the UH-1 had to be flown at reduced weight in order to hover, take off and land safely during combat missions.

The AAH's primary armament or the anti-tank mission consists of the HELLFIRE missile system having a range greater than that of the primary threat weapon and with practical pinpoint accuracy. The AAH's visionics system offers detection, recognition, and identification beyond 2500 meters. The combination of the PGM, mobility, and visionics provides the helicopter with distinct advantages to counter the tank threat. When this capability is compared to the tank's capability, the helicopter is ahead in at least two areas. If the tank has an advantage it lies in its armor protection relative to the modern attack helicopter. The tank's gun, mobility, and armor (better than ever) will not provide the necessary protection against attacking armed helicopters. Only terrain cover and concealment, and restrictions to visibility will stand a chance of providing the tank with the protection it needs against being seen by attacking armed helicopters. Obviously, air defense, and other fire support men employed under the combined arms team

concept will further enhance the protection of the tank. The issue is not whether the attack helicopter will replace the tank, or if the tank will be replaced by some other means of engaging combat; no, the issue is, "shall the tank continue to be the major threat to the battlefield that it now is?" With the helicopter's mobility and its use of PGMs, it appears sage to state that the tank shall continue to be a major threat to conventional ground forces as long as the visibility problem and the tank threat problem is solved. This is the helicopter's design frontier and challenge.

An examination of the current impediments restricting airborne visibility (and guidance systems) as shown below, reveals the nature of the challenge:

<u>Detection/Guidance Techniques</u>	<u>Visibility/Guidance Restrictions</u>
. Laser Designation and Homing.	. Fog
. Manual (visual), wire guidance, Infra Red Tracking and Homing, Laser Homing, Electro Optical	. Smoke
. Electro Optical Contrast Seekers.	. Camouflage
. Infra Red Tracking and Homing. Optical Contrast Seekers, Laser Designation and Homing.	. Flare
. Command Guidance, Beacon Position fixing.	. Jamming

The principal restrictions to visibility and guidance are shown. In addition, both natural and man made restrictions to visibility should be included since they impact the effectiveness of the detection and guidance systems. In effect the visibility restrictions become countermeasures which degrade the performance of crews, designators, guidance systems, and sensors. Although new improved infra red and microwave sensors are in development, most PGMs will continue to require clear daylight (fairly good weather) to function properly for the remainder of the 20th Century. Unless technology breakthroughs occur, the ability to detect targets and to guide PGMs will remain at about 5000 meters, and even then subject to favorable weather and visibility conditions.

The need for technology breakthroughs in the visibility area may be obtained by noting the accepted principles of tank employment by the Soviets. Tanks are employed using practical principles governing the use of terrain cover and concealment, and darkness (weather and night) to hide tanks in order to gain surprise. Some of the principles are shown below:

- Tank units conduct night marches or marches when visibility is limited.
- Tank attacks are usually scheduled to begin between midnight and dawn.
- Attack of a strongly defended city is normally done during darkness or under the cover of smoke.
- They stress the use of camouflage and deception at all times.
- They consider night tank attacks as normal combat operations.
- Darkness and limited visibility are a tank's best defense.

Tanks are employed using supporting arms and services to give protection against air, armor, artillery, ATGMs, and observation. When this is considered, one must keep in mind that the PACT forces outnumber NATO about three-to-one in the number of tanks possessed. Moreover, the PACT outnumbers us three times in artillery pieces, two times in heavy mortars, thousands more radar guided SAMs, and a third more armored personnel carriers. The PACT places great emphasis on the use of heavy equipment, such as, tanks, mechanized vehicles, carriers, and mobile machinery of all types for use in the combat zone. One could quite naturally infer that the tank is the primary threat to the conventional battle area in central Europe. One could also infer that the key to solving this primary threat remains in the area of airborne visibility. Solve this problem and the tank threat problem is solved.

The attack helicopter possesses a mobility advantage over the tank. It possesses a missile with practical pin point accuracy whose range is greater than its primary threat weapon - ZSU 23-4. It is designed to take multiple hits and continue flight. It has the world's best visionics system. Yet, the helicopter cannot work at night and during conditions of reduced visibility with ease and efficiency equal to its daylight performance. This is the challenge. Today, if the crew in the cockpit can see the tank, they can kill it. What is needed is for us to be able to say, "we can see it and we can kill it". A technology breakthrough must occur for this to happen.

TERRORISM & COUNTER-TERRORISM:
DESTRUCTIVE TECHNIQUES

By

Harvey J. McGeorge

We are going to talk about destructive techniques; how the terrorist does what he does. We'll delve later perhaps into why he does it and the response to it, but first let's look at how he does what he does. We have a variety of types of terrorism, and I'm going to use the word terrorism in a very loose context, and don't hold me now to a specific definition of what terrorism is. It depends an awful lot on your perspective as to what terrorism is. I'm going to use it as a generic term to describe anyone who commits violence.

There are three types of people who commit violence if you wanted to narrow it down. First we have the saboteur. His goal is the destruction or disruption of some normal daily occurrence. If in a large office building we turn off the electrical power so that the IBM typewriters don't work and the telephones don't work, that's good sabotage. You don't have to kill anybody, just interrupt the flow. If the typewriters don't work business stops. Good sabotage. Second, the assassin is someone who has in mind the death or serious injury to a particular individual or particular groups of individuals for whatever reason, but he is very target specific. Third and last, the terrorist is the catch-all for everything else. A terrorist may employ sabotage or assassination as techniques but we'll use the term terrorist just because it's the term that we all use today.

Let's look at some of the tools available to the terrorist. There are of course firearms, explosives, chemical, biological, nuclear and mechanical devices. We will not be discussing firearms in this forum. Explosives are what I am going to spend my time on. I don't think it is covered anywhere else in the presentations here at Defense '83 and it is certainly what we are in the middle of right now. The principal way terrorists do what they do as far as violence goes is explosives.

Chemical, biological and nuclear we can lump all into one. These are things that have been dabbled with and may in the future at some point become a serious problem. By no means are they a problem at this time. We need to think about them and I will mention in the course of my presentation ever so briefly a specific incident or two, but it is not a problem of today. It is a problem of tomorrow.

Mechanical things--that relates primarily to the saboteur. It is unfortunate that we are limited in time today because it is an area where perhaps the greatest ignorance lies. We are all very aware of explosives as a terrorist tool, however we are usually much less aware of the mechanical means by which sabotage can be accomplished. I refer to liquid metal embrittlement, and a number of other things security people and related people with this responsibility have never heard of, much less understand. Liquid metal embrittlement can cause the wings of an airplane to fall off or the landing gear to collapse when you put a load on it and it is just like a paste. You smear it on steel or you smear it on aluminum; things crack and fall apart. We don't have time to delve into that unfortunately, because that is not as common a technique as the explosives. So without further ado, we'll charge off in that direction.

There are various targets that the terrorists may exploit. He can attack the unprotected individual out on the street. In some areas of the world that is particularly common. He can attack aircraft. We have had a great deal of that in the past; it kind of goes in waves. Buildings themselves can be attacked and we will point out specific examples of that and I've highlighted automobiles because they are perhaps the principal target. A person in the automobile has no defenses to speak of. He may have an armored car and that may protect him against a few things but he does not have the option to pick his time and the place of the attack. The terrorist does. The terrorist picks the time, picks the place, initiates the attack and can do it all from a relatively defensive position. It doesn't leave you a whole lot of options in the car. You're in a bad spot. So we are going to spend some time looking at those possibilities.

Let's look at the automobile first. There are about three ways to blow up a car, or to use explosives directed towards the car. You can put the bomb on the car obviously, you can put it in close proximity to the car or you can project the device at the car. Let's look at each of these three in turn.

The simple blast device attached to the car--this is the classic thing in the Mafias of years ago, to put the three sticks of dynamite under the hood of the car and when you turn the ignition key on, the bomb goes off. Well, Detroit has made that a bit more difficult now because you have to get inside the car to open it and that's relatively difficult. Most commonly, you see devices that are attached to the car or just placed beneath it. A fine example of this is the assassination of Orlando Letelier in Washington some ten years ago. That device was placed on his car. He ran around with that car for about three days with the bomb attached to it. That was not

the terrorist's intention. Shortly after they attached the bomb they decided the time was right and they sent their signal to detonate the device. However, in attaching it, they turned their little mechanism off or failed to turn it on or had some switching malfunction. This necessitated them approaching the car a second time, going underneath it, flipping the switches around and the bomb worked much better the second time. This is a very common technique. As long as you can gain access to the car, it works really well. Mr. Letelier didn't have too much time going for him here. Less than a pound of explosives was used. I've seen all sorts of estimates from a quarter of a pound up to a pound and a half. I suspect that what we are looking at is about a half pound worth of damage. The thing was rigged with a paging device as the fusing mechanism which was very clever; one of the first devices I'm aware of to use that sort of mechanism.

In Letelier's situation, the damage was facilitated or enhanced by the fact that he had no armor. Although he had been allegedly warned by our government that he was a principal target and that there was a plot in progress to do him in, he did not take the precaution of using an armored car. He did not check his car on a routine basis. He made no effort whatsoever to ensure that his car was not tampered with as it had been. He rode around with that bomb on the car for three days; not a very good response. As I have noted, it was the first radio-controlled device of this particular type we had seen in the U.S.

Another means that is very common (although not in the United States) of attacking a vehicle is to utilize the gasoline in the gas tank as the principal explosive or incendiary component. We see this very frequently outside of the United States. Most governments that are in the sabotage business manufacture a device to do this. Terrorist improvise them rather routinely.

An example of this is Balboa Hospital in Panama about 1976. The bad guys wanted to emphasize that the U.S. should get out of Panama. Very late one night, I believe a Sunday night, they went into the parking lot of the hospital which was very quiet at that point, and attached about half a dozen different explosive devices to the cars.

Most of the devices were what we call a soap dish device. It was a combination of explosive, a finely divided metal and some sort of fusing mechanism. In this case I know they used a burning time fuse because we found some of that laying around.

The damage to the car in this instance was fairly intense for this sort of device. Generally speaking, there is less

damage. The device relies on the gasoline in the car. Not to say that it is not possible that they only used a quarter pound of explosives here as alleged, it's just that they were awfully lucky to get it to go just perfectly.

To illustrate just what normally does happen and as an investigative tool since this is used frequently, I'll explain what goes on. The soap dish is placed just under the gas tank and attached to it with a couple of magnets. It is full of steel wool, explosive, a blasting cap, and the fuse. From my experience, it doesn't make a whole lot of difference how much gasoline is in the tank. When the bomb goes off, there is quite a roar of flame from the gasoline, which doesn't do the car much good. It works very quickly and the destruction is complete. I've looked at a whole lot of cars that have been blown up in various ways and when you see the trunk lid peak, the next thing to do is look underneath, and if there is a large hole where the gas tank was, it's a pretty good bet that a soap dish device was used.

This sort of thing has been done many, many times. I've had a chance to witness this technique probably half a dozen times or more and the peaking of the trunk is a very characteristic response. What happens is, the gasoline is compressed by the explosive itself and this compressed hot gasoline is squirted up into the trunk. Overpressure in the trunk forces the trunk lid up because the pressure is going in all directions. It also blows the fire wall through the back of the car. The hot gasoline then rushes in vapor form into the car. Remember, there is also some finely divided metal involved in this thing. That finely divided metal holds the heat of the explosion just long enough so that when the gasoline mixes with the large volume of air and oxygen in the passenger compartment, we have a sufficient ratio of oxygen, fuel, and heat to cause an instant deflagration.

This is a real effective technique and terrorists know all about this. I can't think of a single terrorist training manual that has received any kind of distribution that doesn't describe the use of this technique. Yet it is not a difficult one to beat. They have to put it on the car. It doesn't take very long to counter something like this when you can either locate it after it's there (which is really a kind of a bad way to do it) or prevent it getting there to begin with. Surveillance of the car is absolutely necessary.

Let's talk about explosives placed beneath the road. This has been done on and off for a very long time one way or another. Recently, in the last ten years I think we have seen this become a method of choice among the more professional assassins and terrorists. The level of effort that is required

to place explosives successfully under the road is considerably greater than the level of effort for other techniques, yet it has been used when other methods might have been available. Therefore it has been chosen for one reason or another. I believe the principal reason that it is being chosen is because it is very difficult to detect.

In the assassination of Louis Blanco in Spain, I don't know how they would have found the explosive under the road; I don't think there was any feasible way. In this particular situation, Admiral Blanco made a fatal mistake when he followed the same route from his residence every day. To take him to the chapel his car would pick him up and make two left hand turns. He did that every morning at 9 o'clock very punctually. A schedule like that is absolutely a death warrant if a person is after you.

Certainly the Basques had no particular love for Admiral Blanco, and had, in fact, made many attempts against his life. None were too clever until this one. My own belief in this particular situation is that they hired some external expertise. This was a lot more sophisticated than anything they had tried previously. In this situation, they dug a tunnel from the basement toward the center of the road. The terrorists rented a basement apartment or gained the use of it and dug a tunnel out under the road, put a T in the tunnel, and placed four or five explosives in separate charges in that tunnel. Then they dual-primed each charge (which is the mark of a pro) and back filled the tunnel (which is the mark of someone with a whip, since it would be very difficult) and that was a very good way to enhance the effectiveness of the bomb. They really knew what they were doing. There were cars parked down both sides of the street. They double-parked a car so that Admiral Blanco's car was forced to pass directly above the row of explosive charges. This guaranteed that they would get him. To insure that the terrorists knew when to set the charge off, there was a paint stripe which appeared to be linked with the detonation painted on one wall of the building. We believe that was an aiming mark. When the nose of the car passed the stripe, the car was above the charges. If that was the purpose of the stripe, and I believe it was, then once again it was the mark of a real pro.

The car was thrown up in the air: it was not simply blown to pieces. The car landed on a third floor balcony in the inside of the monastery, it kind of came down nose first. Admiral Blanco was dead on arrival at the hospital. It took some minutes to realize what had happened to his car. There were security cars in front and behind, and I imagine when they recovered their senses and looked around it was a little disconcerting to see no protectee. Allegedly someone in the

monastery stuck their head out of the window and said, "he's over here." As a former Secret Service person I can think of nothing worse. In this situation Admiral Blanco was killed because they knew his route. That is a common thread through almost every single assassination attempt involving a vehicle. They know exactly where you are going to be and exactly when you're going to be there. In this case they knew down to literally within seconds and within inches where his vehicle was going to be at a particular time. That is a formula for assured success.

Bombs may be concealed alongside a route of travel. As an example I will use an assassination that didn't involve another vehicle. Thomas Enders, who is still in the State Department in a very high position, has had the misfortune to have been the target of assassination at least three times that I can think of. The poor guy attracts bombs - something terrible. In this particular case, which I believe was the first time, it was in Phnom Penh, Cambodia. What they had done was place a moderate explosive charge (supposedly about 25 pounds) in a rickshaw. It was Mr. Enders' habit at that time to go from his residence to the embassy every morning by embassy car via the same route and we know that is not a very good thing to do. In the early '70's, Cambodia was not a good place to do that.

The terrorist in this particular case had laid a wire for command detonation from the bomb in the rickshaw back over behind a small wall where he sought cover. He was a little bit quick on the trigger which is what saved Mr. Enders, who was probably 25 or 30 feet away from the explosion. Air distance between the explosive and the target dramatically reduces the blast effect. Twenty-five or thirty feet is a pretty good distance to be away from twenty-five pounds of explosive. Enders was fortunate enough to have an armored car; the armored glass did withstand the force of the explosion. The windshield was broken subsequently by the fire department in order to put out the fire. The bomb was placed, and he was the target because his route was not varied. Like most executives, he chose to go the same route every day.

When I was in Secret Service, we had a terrible problem with Vice President Mondale in that regard. He was residing at the Naval Observatory and of course, would commute every morning down to the White House to go to work. Well, he wanted to go down Massachusetts Avenue and then make a right and go down Rock Creek Parkway with no variation. Well, that can be dangerous. So we were very creative with our versions of the truth as to why we couldn't exit the front gate and why we couldn't go down Rock Creek Parkway. It was amazing the regularity with which Rock Creek Parkway was totally backed up and jammed or why they were fixing the front gate every other

day. That was the only way we were able to vary the route. It is a significant problem when dealing with senior people. They don't want to take the time out of their schedule to submit to the necessity of security.

Explosives can be projected at a car and certainly have been many times. Shooting some sort of rocket at a car has become a very common technique. I spent quite a bit of time recently in South and Central America and I saw more RPG-2 rocket launchers there than I ever saw in Southeast Asia. One very notable target of rocket attack is former Nicaraguan President's Somoza's car. I believe that the rocket clipped it just above the driver and just barely hit it. It was supposedly an RPG-7, which will defeat any armored car around today. It was meant to defeat tanks and does that really well. Armored cars with a quarter inch of armor just are no match. The RPG-2 is by no means the most modern but it is one of the more common launchers. Its rocket is not terribly accurate, but at typical engagement ranges, it is more than sufficient to defeat any armored car.

The American 3.5 inch bazooka rocket has not been in production in this country for a number of years. It does, however, possess characteristics which are uniquely suited to the terrorists. It is, to my knowledge, the only electrically fired rocket around. We've found these particular rockets in significant use in Africa, and in Europe, by the Red Army faction people. We've also had them in this country. Many years ago it was a bazooka rocket that was fired at the UN somewhat unsuccessfully. They overestimated the rocket's range, but that didn't stop them from trying.

Rockets are a big hazard to cars. I don't know of any technique that, once the rocket is in route, will allow you to prevent impact. I don't know of any defense mechanism whatsoever applicable to an automobile. You can't put 3,000 or 4,000 pounds of steel armor on a car. The only defense against rockets is not to be where they are. You have got to ascertain who has got the rockets and avoid them or apprehend them. The other alternative is to make sure they don't know where you are. That's the very best way. They can't shoot if they don't know where you are.

There are other techniques, of course, of projecting things at a car using explosives. Platter charges are something that have not been used too often to date. Platter charges generally use a concave piece of steel plate (although a flat plate will work just fine) as a ballistic projectile. A relatively small amount of explosive will accelerate that plate to very high velocities; typically half to two-thirds the detonation velocity of the explosive. If you are not familiar

with explosives, you're talking about 10 to 15 thousand feet per second.

Let's look at buildings as a target. Automobiles are the most commonly productive target for the terrorist. Buildings are less so though they are frequently attacked. Obviously the recent events in Beirut demonstrate that quite clearly. We can attack a building once again in about the same three ways. You can put the bomb inside, you can put the bomb outside or you can shoot something at the building. Let's talk about each of these.

Putting the bomb inside has of course been done on many occasions. There are all sorts of ways to smuggle an explosive device in, even through some very effective security in the United States. We had a little spate of unfortunately embarrassing incidents where they put a bomb inside the U.S. Capitol and they put a bomb twice inside the State Department. The second time was very embarrassing. The terrorists said, "We're going to do it again." The State Department said, "No, you're not" and it was done again anyway. That didn't do anything for the prestige there. At the Pentagon there have been incidents of bombs getting in through what was supposedly pretty good security. Harvey's Casino in Nevada is another example. I have heard all sorts of rumors as to how much explosive was there. They were alleging at the time that it was 1,000 pounds. I don't know if that's quite correct or not. My own belief is that it wasn't really quite that much, but it was a lot. To go into why the bomb went off, I don't think the thing was managed well. The terrorists got it in, if I understand correctly, by disguising it with a blanket over it as a Xerox machine or some such thing. Who would question a Xerox machine moving in or moving out? It's an effective way to get the bomb in. That's what mattered. A bomb inside will do a lot of damage.

But, it's not necessary to get the bomb inside. If we take a big enough bomb and detonate it in close proximity to the target, that will be sufficient. Certainly the IRA has some experience at doing that. It is not uncommon for them to have 300-400 pounds of ammonium nitrate related explosives or something else stuffed in the back of a car and they'll detonate it and do a great deal of damage. They have built bombs up to 1,000 pounds and I think a 1,000 pound one did in fact go off. I know they recovered one in that size range.

We had one here in this country a good deal bigger than that. At the University of Wisconsin in 1970 we had one that was about 1,800 pounds of ammonium nitrate. That, to my knowledge, is one of the largest bombings to take place. What the student people did, they said in their underground

newspaper, "We are going to blow up the building." The security people said, "OK, right. We have our campus cops here and they're not going to let that happen." Wrong. The students did precisely what they said they were going to do. They went down to the local Agway store. I say that facetiously, I don't know where they got the explosives, although I assume it was probably at the local Agway store. They bought a ton of known explosive. Any ammonium nitrate over 26 - 1/2% total nitrogen will go bang (and it did). They also bought some dynamite to kick it off with. They mixed it all out in the woods, put it in a couple of big garbage cans, put them in the back of a rented van and they parked it next to the Army's math and science research center. I don't know what was being done in the research center, no doubt a very important Army project, counting spots on tadpoles and other such research projects. The students were certain they were running the war in Vietnam there and I'm sure the truth lies somewhere in the middle. It really doesn't matter.

The students put almost a ton of explosive outside the wall of this building and made it go bang at about 3 o'clock in the morning. It did not do the building any good whatsoever. It blew the heck out of it. That building suffered somewhere between a million and a half and six million dollars worth of damage. It cost the terrorists \$125 to do what they did. That's not a bad return on their investment. This is sabotage. Sabotage can be very cost effective. You don't have to get your bomb inside, but if it's going to be outside, you have got to have a pretty big one.

The explosives can also be projected at the building itself. In 1972, Black September decided that it would be a good idea to shoot some rockets at the American embassy just to let them know they were still around and that they could strike with impunity, which they did. In this particular situation, of the four American 3.5 inch bazooka rockets that were in the car (which sat there for a week without anyone noticing that it did not belong there), three of the rockets fired. Two of them actually hit the embassy, a grazing shot across the front. One landed out in the yard out front. Of the two that hit the embassy, only one detonated. The car that they were fired from had paint splotches on the side of the car as camouflage, and it was a very clever idea.

They took regular undercoating, red paint, and splotched it down the side of the car. They had bundled the rockets together in their shipping tubes, stuffed them up next to that side of the car, cut holes for the rockets to exit from and covered the holes with a bit of very thin plastic, taped it down and brushed the paint over it. The guard on duty is supposed to have admitted that he went up and actually poked it and he thought that someone had a rusted-out section on the

body of their car and they had done some fiberglass repair or were in the process of doing it. The camouflage was excellent.

An E cell timer was used to give a long time delay. The rockets were fired on a Sunday afternoon. One rocket did not go off on impact. It just went thud. The other one did a small amount of damage. Since it was outside, most of the damage, most of the destructive force of the rocket, just vented to the atmosphere.

Perimeter security is the obvious issue. In this particular case we didn't keep people from parking their car next to the embassy. I guess generally they should be able to. How far out do you make your perimeter to stop rockets and such? That little rocket, shot the way it was, will probably go 200-300 meters. Out of a regular launch it will go almost 900 meters. We can't make the perimeter of the building 900 meters away from the face of the building. That is unrealistic. We probably can't make it 50 meters away generally speaking. So what do we do? It's a real bad problem.

Also, the probability of these kinds of rockets being shot out of a vehicle against a motorcade is quite high. There is no way generally speaking that you can clear all the streets. Even when the President (or whoever) is coming down the street on some officially announced thing, you can only clear the road that he is travelling on. Major cities will generally not clear sideroads. There is nothing to prevent a terrorist from launching this sort of an attack out of a vehicle perpositioned on a sideroad. This is a serious problem.

The next type of target we will talk about is aircraft. Aircraft have, for a long time, been targeted by people who would smuggle bombs on board. Most recently we see a wave of people bringing flammable liquids on board. Metal detectors do not detect that. Someone gets on board with a Zippo lighter and little tube of lighter fluid or gasoline or whatever and can be successful in getting control of the aircraft. We've also run into situations where aircraft have been shot at with shoulder-fired heat-seeking missiles. This is likely to increase also, and it deserves a little closer attention. Aircraft are susceptible, of course, to having objects placed in them, typically in the hold baggage. Or, the explosives can be carried on board. They have been on numerous occasions; the hold baggage presents quite a problem. There is no effective way other than dogs (as far as time goes) to screen all the bags going into the hold of an airplane. You can x-ray them and that works well as long as you rotate the x-ray operators very frequently, because after a while all they see is a blur coming up in front of their face and they don't recognize things. The dogs are about the best way. The sniffing devices like electronic sniffers have not proven to be sufficiently

reliable that I would want to bet my life on them. There are not enough dogs and they are not cheap. So we still face this problem of explosives getting aboard the airplane when placed in the hold baggage.

Back in 1972 there were two TWA aircraft. One was up in the air en route to Las Vegas and the other one was just taxiing down the runway at Kennedy Airport. I don't know where it was going, but it wasn't up yet, it was just taking off. A call came in through TWA saying "We have a bomb on board flight A and flight B. TWA responded very quickly and they told the one up in the air, "Hold your altitude," which was an excellent move. They told the other guys, "Put it down right away," another very good move. The airplane sat down, they examined it very carefully, and lo and behold, a bomb was found in the hangup bag compartment. So TWA told the other pilot, "Bad news here. We've got one." So they did an inflight search that didn't turn anything up. They landed in Las Vegas and they searched that plane up, down, in and out and allegedly with dogs. Some people said they didn't use dogs, others said they did. It doesn't matter. They didn't find the bomb.

Some hours later however, the front end of the airplane fell off. There was in fact a bomb there. The bomb had been smuggled in and it was in the cockpit. You are not supposed to get into the cockpit of an airplane, let alone put a bomb there, but it is quite obvious someone did. In this situation it was probably someone with access to authority to gain entrance. no doubt, ramp crew or someone else who was able to penetrate security. OK, he got it there. Why didn't we find it?

We didn't find it because of complacency. The people doing the search made some assumptions that they had no right to make. I point this out because I think this happens all too frequently. Since most incidents do not result in a bomb, it is very easy to become complacent. In this situation the bomb was in the first aid kit on the wall of the cockpit. Why wasn't the first aid kit which is obviously a container, opened and searched? Well, the rationale given by the people who conducted the search was that the first aid kit contains certain narcotics and if you break the lead seal on the latch on the first aid kit, you will spend the rest of your career at TWA writing forms as to why you were messing around with the box containing the narcotics. They said that the seal appeared to be intact, therefore there was no way that there could be a bomb inside. Wrong. Obviously they were incorrect. They made assumptions they had no right to make, especially considering the fact of the other bomb. I mention this not to point the finger shamefully at TWA search techniques, because I think they handled it a lot better than most agencies would have

handled it. But you can see that it is very easy for searchers, regardless of previous training, to become complacent.

Bombs of course can be carried in. That has been done. It is done now, though not usually with regular explosives. In connection with the kidnapping and ultimate death of Hans Schleyer a Lufthansa airplane was hijacked and it ended up at Mogadishu. How did the terrorists get the grenades, semtex and guns on board? They got it all on board because they understood the psychology of the Germans in this case. They understood very well the mind set of the relatively low paid people who man airport checkpoints. That's not where you put your \$30,000 a year man, watching the x-ray screen; it's the minimum wage person working there who presents us with obvious problems.

If I understand what happened correctly, the terrorists ran down the hallway at the very last moment toward the flight waving their bags, waving their tickets, and screaming bloody murder that someone should hold the plane, hold the plane. This created mass confusion, and all sorts of upset. Well, what low level employee wishes to be considered the cause of the delay and the cause of all of this mass confusion? Nobody. Because no matter what happens, he's going to be responsible and he is the one who is going to get yelled at. So he did what is very predictable. He said, "Go, get out of here, stop yelling, go." I don't know the German words but I'm sure that is about what he said. Fine. It worked great. On the plane they go. I have no doubt but that the same technique would be just as successful today if you picked your airport carefully. They got on board and they did their thing with explosives they had carried on board. Ultimately, they lost, but they did penetrate security quite successfully.

Airplanes are also susceptible to attack by shoulder-fired heat-seeking missiles which we know have been used by terrorist groups. I use the word terrorist kind of loosely. In the 70's there were one or two; a Rhodesian airplane was shot down with these. Not long ago, an airplane was shot down with one of these things in Ecuador. I believe the Italians recently said that it was a missile that brought down a plane between Italy and Sicily.

The Soviets are grinding out these missiles like mad. So are several other countries and supposedly Colonel Qadhafi is not reticent to pass these out.

The Soviet SA-7 missile is like the American Redeye and our newer Stinger and several others around the world. All these missiles are, for practical purposes, identical. The Soviet

one is better than most of the others, but not by much. Most of them have between a 10,000 and 15,000 feet slant range. Most of them have about a one kilogram blast type warhead (which is not very big) and they are all heat-seeking. Some discriminate more than others as to what particular portion of the color spectrum they are looking for in an effort to avoid countermeasures. There are all sorts of flares and whatnot that have been used as decoys and they do not necessarily work very well. There are countermeasures that do work quite well against these things but they are very expensive. When El Al was still flying they had a device made by Sanders Associates that is meant for large aircraft and that supposedly was quite successful in tests at defeating these missiles. I know Northrop makes one and I think some other company, Xerox, if I am not mistaken, makes devices that will decoy or confuse these shoulder-fired heat-seeking missiles.

Let's talk about what kind of damage one of these missiles does. In general the heat-seeking missiles are going to bring down a helicopter. They will probably bring down twin engine executive transport aircraft, G-2s, G-3s, Falcon 50s, Falcon 20s, and that type of aircraft. The missile probably will not knock down large four engine aircraft, for example a 707 or 747.

We have talked about the automobiles, the buildings, and the aircraft. There are also attacks against people. A common technique is the letter bomb. There have been just under 1,000 letter bombs sent. The vast majority of these letter bombs originated at one place--probably very few people actually put them together because they are almost identical.

Let's discuss a book bomb that was received at the British embassy in Washington. This book bomb was mailed by the IRA and contained a small quantity of dynamite--a few ounces of dynamite--a blasting cap, a battery out of an instamatic camera, and two pieces of metal foil as a switching assembly. This is a very clever book bomb. They have been used a few times. The IRA is not big on book bombs. They have sent a lot of incendiary devices by mail for some reason but they don't send book bombs all that often. This was very successful however. They do a few of these and they don't need to do it too often.

The envelope that that bomb was received in was addressed to Brigadier Mills and the Brigadier had been the military attache at the embassy. He would not have opened this probably anyway. Who do letter bombs hurt? Do they injure the person they are addressed to? Not normally. They never see it. If you are important enough that somebody would send a letter bomb to you, you don't open your own mail anyway. In this case a secretary opened the envelope to see if the mail was for

Brigadier Mills personally or for the office. As soon as she opened the envelope, she saw the end of the book and she pulled the book out a little bit and allowed the two foil contacts to come together and the bomb went off in her hand. This is typical. Most letter bombs do not kill anybody. Generally we are talking somewhere between 2 and 4 ounces of explosive. This is not enough to kill somebody unless they have just absolutely bad luck. It does maim them and that's what it did to her. It maimed her quite severely.

The British (if there is anybody in the UK here, I apologize) made a really dumb move because she still works there in the embassy. Psychologically that is not a good thing to do. Retire her someplace else, because when you look at her, people ask what happened, then the story gets retold again. That is not what you want. It is like keeping it in the newspaper.

Another bomb was received at the Iraqi Embassy in Washington. This was kind of unique. The Arabic written address is not the normal way one would write an address. I believe the name of the intended recipient is repeated twice, which doesn't make a whole lot of sense. The post office department in New York City put a correct penciled-in address on the envelope. They did not detect the presence of a letter bomb in the mail. The postmark in the lower left hand corner is from Rome. To my knowledge just about every single letter bomb that originated in the Arab countries originated in Iraq and was mailed either in Rome or Amsterdam. I am unaware of any that were mailed anywhere else. I believe that over 500 letter bombs were mailed like this in either Rome or Amsterdam. They are all constructed essentially identically. This one should have gone off. The techniques they used to handle the bomb were very poor. In fact, the embassy itself was leery of it. They summoned assistance.

A dog team came. The dog stuck one nostril inside the door and sat down, indicating that this is a bomb. The dog handler and dog exited stage right immediately. They're the only ones who did. The dog understood what was going on and the handler believed the dog. They got out of there. So far, so good. Then the bomb technician arrived. He was less clever than the dog. He went over to the bomb and opened the envelope. The bomb is supposed to go off when you do that. The duty angel of EOD men was on duty that day and the bomb malfunctioned. I know the bomb fellow really quite well and he aged a great deal all in one day. He has white hair on his head now, and he doesn't do that anymore.

The bomb was composed as follows. In the upper left hand corner on a piece of white paper is the blasting cap that has

been squashed in a vise. Not a healthy thing to do to blasting caps but that's what they do. In the upper right on the envelope is a European style rifle primer assembly which fits in the left end of a brass bar. That is what is impinged by the firing pin, producing a jet of flame which then subsequently enters the blasting cap and sets it off. A bit of tape below the primer assembly holds the blasting cap and the firing assembly together. There are also some strips of blotter paper. The actual explosive was Czechoslovakian Semtex H which is "a special industrial explosive." I am unaware of any industrial use of Semtex H. It is used a lot for letter bombs. It has about 11% vegetable oil in it and it exudes oil. That's why they have the blotter paper, to soak up the oil.

A technique that was taught at one time for detecting letter bombs was to look for oil stains on the bottom of the envelope. The oil comes from the explosive and terrorists got wise real fast and started using the blotter paper to absorb the oil. This explosive is, for all practical purposes, identical to any other major plastic explosive today. It has a consistency very much like C3. Somewhat oily, somewhat granular and it is quite potent. This is powerful stuff like C4 and it has been used in every single letter bomb like this. They all are readily detected by dogs, readily detected by x-ray and also generally detected by the stud finder metal detectors.

Toxic agents have also been used to attack people. This has been done for a long time and various things have been used--toxins, poisons and all that. More recently there has been a fairly clever thing done and it has happened enough times to make it significant. If you remember back in the late 70's, about 1977 or 1978, there were two Bulgarian dissidents. One got nailed in Paris and one got nailed in London with a special device. I do not remember which was hit first. It really doesn't make any difference. The point is it happened and it has happened at least three times since then. The item itself is made from a platinum-iridium alloy common to high-temperature thermocouples. The ball is a little bitty guy about 1/16th of an inch in diameter. The holes in it are not very big. They contain a crystalline form of ricin which is a toxin. Unfortunately and much to my embarrassment, this was a U.S. idea.

Back in World War I we fooled around with ricin and in World War II we had what we called a W bomb which was a ricin bomb. After the war we decided the German organofluorophosphates, the nerve gases, were a better idea so we dropped ricin and the W bomb. The U.S. is now, however, the only country in the world that uses ricin. The UK was

conducting a considerable study of ricin at Exeter University up until at least the late 60's. In India ricin is a very big topic. The Japanese are supposedly the most knowledgeable people on the subject and there are a few other countries that come to mind that know a whole bunch about ricin.

We think an umbrella was used to launch it because the two fellows lived long enough to say that when they turned around, there was a guy with an umbrella there. Well, the situations were sufficiently suspicious to believe that it was the launcher. Whether the ricin was shot out of it or whether it was stuck on the end of the umbrella and jabbed into them, we don't know.

What we do know is that once it gets into the person, in about four days they die. Of the five people that I'm aware of that have been hit with this, four of them are dead. One of them died in spite of absolutely heroic efforts to save him. They knew exactly what was in him. They knew exactly how it got in him and how long it had been there (which wasn't very long), and the very best efforts were not able to save the guy. Ricin is rough stuff. There is no antidote.

There have been some treatments suggested. Not medical, but more topical in nature. The ricin itself is contained in the little ball by some type of wax. The wax (perhaps coincidentally) melts at more or less body temperature. The supposition is that when it goes a few millimeters into the skin the wax will melt allowing a rush of blood to the area of insult to wash the ricin out. A suggestion was made to keep the area very cold to prevent the wax from melting and keep the profusion of blood down. That would be the best defense until such time as it could be surgically removed. The "Boy Scout knife technique" on the street is not indicated because the ball is miniscule and would be very hard to find.

I have every reason to believe that a KGB agent was nailed by this method in the United States. It was reported that way by the IACP and therefore it is probably true. When the Russians realized what had happened, they bundled him up and scooted him out of the country in one big hurry. We don't know if he is dead or alive but we assume he didn't make it.

We don't know too much about ricin. We don't know who's got it. We don't know who's shooting it and we don't know why they are shooting it. We don't know how many there are. If we do know, I don't know. The point is that it is a significant departure from what we have seen in the past and deserves note. I certainly hope it is not a harbinger of things to come.

In sum, we know we have a threat. The threat manifests itself as terrorism, assassinations, sabotage and what not. The perpetrators have various means at their disposal: explosives, guns, chem-bio, nukes, etc. If we allow an opportunity to exploit those means we have absolutely assured destruction. We must deny the threatening parties that opportunity. That is really our only defense.

THE PROTECTION OF SENIOR EXECUTIVES
AS A RESPONSE TO TERRORISM

By

Harvey J. McGeorge

I am singling out senior executives for protection because they have the money to afford the protection and that's where the emphasis is placed. There are all sorts of techniques to protect senior executives. We can have Secret Service level efforts or we can have much lower levels of effort, right on down to that of one-man bodyguards. What is important, however, is to realize that executive protection needs to be proactive rather than reactive.

Let me illustrate that by pointing out who is not qualified to provide executive protection. All too often we have gunslingers; people who go to this academy or that academy and they learn to draw their revolver in two thousandths of a second and get off 16 shots immediately. What does this accomplish? It lays waste to the surrounding people. It may or may not affect the outcome of the attack. It certainly is not a good approach to follow. We have the karate killers with their fifth degree black belts or whatever. They don't do a darn thing except bleed when shot. I am unaware of the particular kata that teaches how to deflect bullets. Generally speaking, I cannot think of many attacks on people who were defended by a protective detail where the detail did anything except die.

If we look at the Schleyer kidnapping, everybody died. If we consider the Moro kidnapping, everybody died. They died right away. Now in the Moro incident, one fellow had been on the job one day and was not yet complacent and he got off a couple of shots. It didn't do much. I believe he wounded one of the people, but at least he went down fighting. He did something. Machine guns and all the rest of this foolishness accomplish absolutely nothing. Gunfighters and karate killers and musclebound knuckle-draggers do not constitute executive protection in any way, shape, or form. That should be remembered.

You have got to interdict the attempt before it happens. You have to be someplace else, or look sharp so that they pick on somebody else. They went after Moro rather than Berlinguer because Berlinguer's detail looked really good. He was surrounded by guns, knives, dogs and who knows what else. Moro was surrounded with amateurs and he was a soft target for the attackers.

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